

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- Coloured covers /
Couverture de couleur
- Covers damaged /
Couverture endommagée
- Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée
- Cover title missing /
Le titre de couverture manque
- Coloured maps /
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur
- Bound with other material /
Relié avec d'autres documents
- Only edition available /
Seule édition disponible
- Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure.

- Coloured pages / Pages de couleur
- Pages damaged / Pages endommagées
- Pages restored and/or laminated /
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached / Pages détachées
- Showthrough / Transparence
- Quality of print varies /
Qualité inégale de l'impression
- Includes supplementary materials /
Comprend du matériel supplémentaire
- Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées.

- Additional comments /
Commentaires supplémentaires:

There are some creases in the middle of the pages.

In Sessional paper No. 9, Canada. Annual report of the Minister of Public Works ... his control, starts at page v.

In Sessional paper No. 9, Canada. Annual report of the Minister of Public Works ... his control, pages li & lxiii are incorrectly numbered pages l & lxii.

In Sessional paper No. 9, Appendices, page 153 is incorrectly numbered page 135.

In Sessional paper No. 10, Annual report of the Minister of Railways ... his control, pages lvi, lxxvii, xci & xciv are incorrectly numbered pages vi, xxvi, xc & cxiv.

In Sessional paper No. 10, Appendices, page 1s is inserted between pages 1-2.

SESSIONAL PAPERS.

9 - 10^a

VOLUME 9.

THIRD SESSION OF THE SIXTH PARLIAMENT

OF THE

DOMINION OF CANADA.

SESSION 1889.



VOLUME XXII.

1889

Printed by BROWN CHAMBERLIN, Printer to the Queen's Most Excellent Majesty.

890952

80105

See also Numerical List, page 4.

ALPHABETICAL INDEX
TO THE
SESSIONAL PAPERS
OF THE
PARLIAMENT OF CANADA.

THIRD SESSION, SIXTH PARLIAMENT, 1889.

A	C
Adulteration of Food 4c	"Carrier Dove" 75
Agreement with International Railway Co.. 22g	Cayuga, Indian Lands in 44a
Agriculture, Annual Report..... 5	Chaplains of Public Institutions..... 52
Annapolis and Liverpool Railway..... 22j	Chartered Banks..... 18
Appeals in Criminal Cases..... 77	Chignecto Marine Transport Railway Co.... 22n
Archives, Canadian..... 5a	Chippewa Indians..... 44c
Arrears of Annuities due Indians 44c	Civil Service Board of Examiners..... 6a
Auditor General, Annual Report 3	Civil Service List..... 6b
B	Civil Service Superannuations..... 27
Baptisms, Marriages and Burials..... 79	Collingwood General and Marine Hospital.. 41
Beauharnois Canal..... 49g	Coal supplied to Government..... 24
Beef supplied to Indians..... 44b	Commissioner, North-West Mounted Police. 17
Belle Vallée Post Office..... 70	Commission on Capital and Labor..... A
Belleville and North Hastings Railway Co.. 22f	Commissions to Public Officers 31
Belleville Drill Shed..... 71	Conference of Provincial Delegates..... 65
Board of Examiners, Civil Service..... 6a	Consolidated Canadian Loan..... 60
Bonds and Securities..... 35	Cornwall Canal..... 49, 49f, 49i
Bridge across Grand River, Haldimand 69	Criminal Statistics..... 5c
British Canadian Loan and Investment Co.. 40a	D
C	Derby Branch Railway..... 51c
Campbell, Capt. Ronald..... 46a	Disallowance of Quebec Acts..... 47, 47a, 47b, 47c
Canada Temperance Act..... 56	Dominion Scrip..... 80
Canadian Archives 5a	Dredge "Prince Edward" 57
Canadian Pacific Railway:	Drill Shed, Belleville..... 71
Correspondence with Department of Interior as to Lands and Wood..... 36	Dundas and Galt, Road between..... 82
Railway Service in New Brunswick..... 36a	Duty upon Fruit Baskets..... 72
Supplementary Return..... 36b	E
Conveyance of North Shore Railway 22k	Election Trials 48
Canals, Particulars as to..... 49h	Electric Light on the I. C. R..... 74
Canal Statistics..... 4a	Estimates, 1889-90 2
Canals, Sunday Traffic on..... 49c	Expenditures and Receipts..... 32
Cape Breton Railway..... 22	Experimental Farm Buildings..... 63
	Experimental Farms, Annual Report 5b
	Export duty on Sawlogs..... 45a
	Exports and Imports 38

F		M	
"Field Exercise".....	78	Maritime Court of Ontario.....	73
Fire Insurance Companies.....	43	Matane River.....	58c
Fisheries, Annual Report.....	8	Militia and Defence, Annual Report.....	13
Fisheries Protection Service.....	8a	Miscellaneous Unforeseen Expenses.....	28
Fishery Bounty, P.H.L.....	58	Mortuary Statistics.....	5e
Fishery Licenses.....	58b	Mounted Police, Report of Commissioner ...	17
Floods in the St. Lawrence River.....	76		
Food, Adulteration of.....	4c	Mc	
Fortin, Louis.....	51	McMahon Street, Quebec.....	62a
G		N	
Galops Canal.....	49i	N.-W. Territories, Sale of Intoxicants in....	61
Government Savings Banks.....	34	Naufrage Harbor.....	23a
Governor General's Warrants.....	26	Net-fishing in Ontario.....	58a
Grand Narrows Bridge.....	69a	North Shore Railway.....	22k
Great Eastern Railway.....	22d	Northumberland, N.B., Railway in.....	22k
Great North-West Central Railway.....	22c	North-West Central Railway.....	22b
H		North-West Mounted Police.....	17
Hide and Leather Inspector, Montreal.....	33	Nova Scotia, Railways of Western.....	22l
High Commissioner, Report of.....	5d		
Hospital Dues on Ships.....	59	O	
Huron Indians of Lorette.....	44	Ottawa, Expenditure on roads in.....	62
I		Ottawa, Public Property in.....	67
Immigrant Colonies, Report concerning....	15a	Ottawa River, Works on the.....	45b
Immigration Statistics.....	81		
Indian Affairs, Annual Report.....	16	P	
Indian Lands in Cayuga.....	44a	Pilotage Dues.....	23b
Indians, Arrears of Annuities due.....	44c	Pine and Spruce Sawlogs.....	45
Indians, Beef supplied to.....	44b	Pontiac Pacific Junction Railway Co.....	30
Indiantown Branch, I. C. R.....	51b	Postmaster General, Annual Report.....	14
Inland Revenue, Annual Report.....	4	Preliminary Abstract, Canadian Life Insurance Companies.....	11a
Insurance Companies.....11a, 11b,	43	Provincial Conference at Quebec.....	65
Insurance, Report of Superintendent.....	11	Public Accounts, Annual Report.....	2
Intercolonial Railway.....	51	Public Buildings in Dominion.....	64
Intercolonial Railway Electric Light.....	74	Public Printing and Stationery, Annual Report.....	6c
Interior, Annual Report.....	15	Public Property in Ottawa.....	67
International Railway Co.....22g,	51a	Public Works, Annual Report.....	9
Interprovincial Conference at Quebec.....	65		
J		Q	
Jesuits' Estates Act.....	54	Quebec, McMahon Street.....	62a
Jones' Creek.....	69b		
Jones, Simeon, Report of.....	20	R	
Justice, Annual Report.....	12	Railway in Northumberland, N.B.....	22k
L		Railways and Canals, Annual Report.....	10
Labor Commission.....	A	Railways of Western Nova Scotia.....	22l
Levi, David, Seizure on.....	25a	Railway Statistics.....	10a
Library of Parliament, Annual Report.....	19	Railway Subsidies.....	22m
Licenses to sell Intoxicants in N.-W. T.....	61	Receipts and Expenditures.....	32
Loan, Amounts received on account of.....	40	Report of Commissioners on Floods.....	76
M		Report of Simeon Jones.....	20
Manitoba Penitentiary, Tenders for supplies for.....	12a	Road between Dundas and Galt.....	82
Manufacturers' Insurance Company.....	43b	Ross, Hon. William.....	46
Marine, Annual Report.....	7	Royal Commission on Capital and Labor....	A

S		U	
Sault Ste. Marie Canal.....	49b, 49e	Unforeseen Expenses	28
Sawlogs, Export duty on.....	45a	V	
Sawlogs, Pine and Spruce.....	45	Vallerand, F. O., Seizure on.....	25
Secretary of State, Annual Report.....	6	Veterans of 1812.....	68
Shareholders in Banks.....	18	Voters' Lists.....	66
Sioni, Thomas.....	44	W	
Souris and Rocky Mountain Railway.....	22a	Warrants, Governor General's	26
St. Catharines Milling and Lumbering Co. 37, 37a		Water Power, Welland Canal.....	49a
Steamboat Inspection.....	7a	Webster, W. A.....	53
Ste. Anne des Monts Wharf.....	42	Weights, Measures and Gas, Inspection of... 46	
Stephenson, Rufus, Report of.....	15a	Welland Canal, Expenditure on.....	49d
Subsidies to Railways.....	22m	Wellington Harbor of Refuge.....	23
Subway, Straits of Northumberland.....	21	Wheat and Flour.....	39
Sunday Traffic on Canals.....	49c	Works on the Ottawa River.....	45b
Superannuations, Civil Service.....	27	Wreck of the "Carrier Dove".....	75
Supreme Court General Orders.....	50	Y	
Supplementary Estimates	2	Yonge and Escott Townships.....	55
Supplies for Manitoba Penitentiary	12a		
T			
Temiscouata Railway Co.....	22e, 22i		
Trade and Navigation, Annual Report.....	1		
Translation of "Field Exercise".....	78		

See also Alphabetical Index, page 1.

LIST OF SESSIONAL PAPERS.

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

- A.** Report of the Royal Commission on the relations of Capital and Labor in Canada, together with the evidence adduced in the different provinces. Presented to the House of Commons, 16th April, 1889, by Hon. M. Bowell..... *Printed for Distribution only.*

CONTENTS OF VOLUME No. 1.

- 1.** Tables of the Trade and Navigation of the Dominion of Canada, for the fiscal year ended 30th June, 1888. Presented to the House of Commons, 1st February, 1889, by Hon. M. Bowell—
Printed for both Distribution and Sessional Papers.

CONTENTS OF VOLUME No. 2.

- 2.** Public Accounts of Canada, for the fiscal year ended 30th June, 1888 ; presented to the House of Commons, 1st February, 1889, by Hon. G. E. Foster. Estimates for the fiscal year ending 30th June, 1890 ; presented 8th February, 1889. Supplementary Estimates of Canada, for the fiscal year ending 30th June, 1889 ; presented 4th April, 1889. Supplementary Estimates of Canada, for the fiscal year ending 30th June, 1890 ; presented 23rd April, 1889. Additional Supplementary Estimates, for the year ending 30th June, 1890 ; presented 27th April, 1889—
Printed for both Distribution and Sessional Papers.

CONTENTS OF VOLUME No. 3.

- 3.** Report of the Auditor General on Appropriation Accounts, for the year ended 30th June, 1888. Presented to the House of Commons, 4th February, 1889, by Hon. G. E. Foster—
Printed for both Distribution and Sessional Papers.

CONTENTS OF VOLUME No. 4.

- 4.** Report, Returns and Statistics of the Inland Revenues of the Dominion of Canada, for the fiscal year ended 30th June, 1888. Presented to the House of Commons, 1st February, 1889, by Hon. J. Costigan..... *Printed for both Distribution and Sessional Papers.*
- 4a.** Canal Statistics for Season of Navigation, 1887, being Supplement No. 1 to the Inland Revenue Report, for the year ended 30th June, 1888—
Printed for both Distribution and Sessional Papers.
- 4b.** Fourteenth Report on Inspection of Weights, Measures and Gas, being Supplement No. 2 to the Report of the Department of Inland Revenue, 1888. Presented to the House of Commons, 19th March, 1889, by Hon. J. Costigan..... *Printed for both Distribution and Sessional Papers.*
- 4c.** Report on Adulteration of Food, being Supplement No. 3 to the Report of the Department of Inland Revenue, 1888. Presented to the House of Commons, 30th April, 1889, by Hon. M. Bowell..... *Printed for both Distribution and Sessional Papers.*

CONTENTS OF VOLUME No. 5.

5. Report of the Minister of Agriculture for the Dominion of Canada, for the calendar year 1888. Presented to the House of Commons, 15th February, 1889, by Hon. J. Carling—
Printed for both Distribution and Sessional Papers.
- 5a. Report on Canadian Archives, 1888. Presented to the House of Commons, 21st March, 1889, by Hon. J. Carling.....*Printed for both Distribution and Sessional Papers.*

CONTENTS OF VOLUME No. 6.

- 5b. Reports of the Director and Officers of the Experimental Farms, for the year 1888. Presented to the House of Commons, 21st March, 1889, by Hon. J. Carling—
Printed for both Distribution and Sessional Papers.
- 5c. Criminal Statistics for the year 1887. Presented to the House of Commons, 1st May, 1889, by Hon. J. Carling.....*Printed for both Distribution and Sessional Papers.*
- 5j. Report of the High Commissioner for Canada, with Reports from Agents in the United Kingdom, for the year 1888. Presented to the House of Commons, 21st March, 1889, by Hon. J. Carling—
Printed for both Distribution and Sessional Papers.
- 5e. Abstracts of the Returns of Mortuary Statistics for the year 1888—
Printed for both Distribution and Sessional Papers.

CONTENTS OF VOLUME No. 7.

6. Report of the Secretary of State of Canada for the year ended 31st December, 1888. Presented to the House of Commons, 11th February, 1889, by Sir Hector Langevin—
Printed for both Distribution and Sessional Papers.
- 6a. Report of the Board of Examiners for the Civil Service of Canada, for the year ended 31st December, 1888. Presented to the House of Commons, 21st March, 1889, by Sir Hector Langevin.....*Printed for both Distribution and Sessional Papers.*
- 6b. The Civil Service List of Canada, 1888. Presented to the House of Commons, 3rd April, 1889, by Sir Hector Langevin.....*Printed for both Distribution and Sessional Papers.*
- 6c. Report of the Department of Public Printing and Stationery for the Dominion of Canada, for year ending 30th June, 1888. Presented to the House of Commons, 27th February, 1889, by Hon. M. Bowell.....*Printed for both Distribution and Sessional Papers.*

CONTENTS OF VOLUME No. 8.

7. Twenty-first Annual Report of the Department of Marine, for the fiscal year ended 30th June, 1888. Presented to the House of Commons, 1st February, 1889, by Hon. C. H. Tupper—
Printed for both Distribution and Sessional Papers.
- 7a. Report of the Chairman of the Board of Steamboat Inspection, for calendar year ended 31st December, 1888.....*Printed for both Distribution and Sessional Papers.*
8. Annual Report of the Department of Fisheries, for the year 1888. Presented to the House of Commons, 11th April, 1889, by Hon. C. H. Tupper—
Printed for both Distribution and Sessional Papers.
- 8a. Report on the Fisheries Protection Service of Canada, 1888. Presented to the House of Commons, 4th March, 1889, by Hon. C. H. Tupper—
Printed for both Distribution and Sessional Papers.

CONTENTS OF VOLUME No. 9.

9. Annual Report of the Minister of Public Works of Canada, for the fiscal year 1887-88, on the works under his control. Presented to the House of Commons, 1st February, 1889, by Sir Hector Langevin.....*Printed for both Distribution and Sessional Papers.*
10. Annual Report of the Minister of Railways and Canals, for the past fiscal year, from the 1st July, 1887, to the 30th June, 1888, on the works under his control. Presented to the House of Commons, 21st February, 1889, by Sir John A. Macdonald—
Printed for both Distribution and Sessional Papers.

- 10a.** Reports, Railway Statistics of Canada, and Capital, Traffic and Working Expenditure of the Railways of the Dominion, 1888. Presented to the House of Commons, 17th April, 1889, by Sir John A. Macdonald.....*Printed for both Distribution and Sessional Papers.*

CONTENTS OF VOLUME No. 10.

- 11a.** Report of the Superintendent of Insurance, for the year ended 31st December, 1888—
Printed for both Distribution and Sessional Papers.
- 11a.** Preliminary Abstract of the business of Canadian Life Insurance Companies for the year ending 31st December, 1888. Presented to the House of Commons, 4th February, 1889, by Hon. G. E. Foster.....*Printed for both Distribution and Sessional Papers.*
- 11b.** Abstracts of Statements of Insurance Companies in Canada for year ending 31st December, 1888. Presented to the House of Commons, 26th April, 1889, by Hon. G. E. Foster—
Printed for both Distribution and Sessional Papers.

CONTENTS OF VOLUME No. 11.

- 12.** Report of the Minister of Justice as to Penitentiaries in Canada, for the year ended 30th June, 1888. Presented to the House of Commons, 18th February, 1889, by Sir John Thompson—
Printed for both Distribution and Sessional Papers.
- 12a.** Copies of the several tenders sent in for supplies for the Manitoba Penitentiary during the fiscal year 1887-88, with correspondence in relation thereto. Presented to the House of Commons, 25th February, 1889, by Sir John Thompson.....*Not printed.*
- 13.** Annual Report of the Department of Militia and Defence of the Dominion of Canada, for the year ended 31st December, 1888. Presented to the House of Commons, 4th February, 1889, by Sir Adolphe Caron.....*Printed for both Distribution and Sessional Papers.*

CONTENTS OF VOLUME No. 12.

- 14.** Report of the Postmaster General for the year ended 30th June, 1888. Presented to the House of Commons, 5th February, 1889, by Hon. J. G. Haggart—
Printed for both Distribution and Sessional Papers.
- 15.** Annual Report of the Department of the Interior, for the year 1888. Presented to the House of Commons, 27th February, 1889, by Hon. E. Dewdney—
Printed for both Distribution and Sessional Papers.
- 15a.** Summary of Reports on the London, Crofter, Scandinavian, Hungarian, Church, German and Icelandic Colonies. Presented to the House of Commons, 30th April, 1889, by Hon. E. Dewdney*Printed for both Distribution and Sessional Papers.*

CONTENTS OF VOLUME No. 13.

- 16.** Annual Report of the Department of Indian Affairs for the year ended 31st December, 1888. Presented to the House of Commons, 7th February, 1889, by Hon. E. Dewdney—
Printed for both Distribution and Sessional Papers.
- 17.** Report of the Commissioner of the North-West Mounted Police Force, 1888. Presented to the House of Commons, 18th February, 1889, by Sir John A. Macdonald—
Printed for both Distribution and Sessional Papers.

CONTENTS OF VOLUME No. 14.

- 18.** List of Shareholders in the Chartered Banks of the Dominion of Canada, as on the 31st December, 1888. Presented to the House of Commons, 27th February, 1889, by Sir John A. Macdonald*Printed for both Distribution and Sessional Papers.*
- 19.** Report of the Joint Librarians of Parliament on the state of the Library of Parliament. Presented to the House of Commons, 31st January, 1889, by Hon. Mr. Speaker—
Printed for Sessional Papers only.
- 20.** Report of Simeon Jones, Esq., Commissioner to South America, with respect to the Argentine Republic, Uruguay and Brazil. Presented to the House of Commons, 5th February, 1889, by Hon. G. E. Foster*Printed for both Distribution and Sessional Papers.*

21. Return to an Order of the House of Commons, dated 9th April, 1888, for a copy of report of engineers and surveyors appointed to survey the Straits of Northumberland from Carleton Point, Prince Edward Island, to Cape Jourimain, New Brunswick, during the summer of 1887, with the view of ascertaining the practicability of building a subway across the Straits. Presented to the House of Commons, 4th February, 1889.—*Mr. Perry*.....*Not printed.*
22. Return to an Order of the House of Commons, dated 7th May, 1888, for copies of all correspondence and telegrams between the Department of Railways and Messrs. Sims and Slater, contractors for the eastern section of the Cape Breton Railway, between the Grand Narrows and Sydney. Presented to the House of Commons, 4th February, 1889.—*Mr. Flynn*...*Not printed.*
- 22a. Return to an Order of the House of Commons, dated 9th April, 1888, for copies of all papers, documents, telegrams and correspondence in connection with the land grant to the Souris and Rocky Mountain Railway Company, or relating to the construction of said railway. Presented to the House of Commons, 4th February, 1889.—*Mr. Edgar*.....*Not printed.*
- 22b. Return to an Order of the House of Commons, dated 9th April, 1888, for copies of all papers, documents, telegrams and correspondence in connection with the land grant to the North-West Central Railway Company, or relating to the construction of the said railway. Presented to the House of Commons, 4th February, 1889.—*Mr. Edgar*.....*Not printed.*
- 22c. Return to an Order of the House of Commons, dated 9th April, 1888, for copies of all papers, documents, telegrams and correspondence as to the incorporation of the Great North-West Central Railway Company, or relating to any land grant thereto, or to the construction of the line of the said railway or any part thereof. Presented to the House of Commons, 4th February, 1889.—*Mr. Edgar*.....*Not printed.*
- 22d. Return to an Order of the House of Commons, dated 6th February, 1889, for copies of all petitions, reports and other documents in relation to the granting of subsidies by the Dominion Government, to the proposed line of railway from Montreal to Lévis, known as the Great Eastern. Presented to the House of Commons, 26th February, 1889.—*Mr. Rinfret*—*Not printed.*
- 22e. Return to an Order of the House of Commons, dated 6th February, 1889, for a Return showing :
1. A list of all the present shareholders of the Témiscouata Railway Company. 2. The number of shares held by each shareholder. 3. The amount paid by each of them on their respective shares. Presented to the House of Commons, 7th February, 1889.—*Mr. Dessaint*—*Not printed.*
- 22f. Return to an Order of the House of Commons, dated 13th February, 1889, for a Return of all correspondence between the Grand Trunk Railway authorities and the Government respecting the subsidy granted for the completion of the line of the Belleville and North Hastings Railway Company from the village of Madoc to Eldorado, in the North Riding of Hastings, and in reference to the work done towards the completion of such work and respecting the acceptance and opening up the same for traffic. Presented to the House of Commons, 8th March, 1889.—*Mr. Burdett*.....*Not printed.*
- 22g. Return to an Address of the House of Commons, to His Excellency the Governor General, dated 11th March, 1889, for copies of an agreement of 14th December, 1885, between the Dominion Government and the International Railway Company, for the construction of a line of railway from the south bank of the St. Lawrence river, at or near Caughnawaga, to harbors of St. Andrews, St. John and Halifax, *via* Sherbrooke, Moosehead Lake, Mattawamkeag, Harvey, Fredericton, and through township of Salisbury to Moncton. Also for copies of any and all changes that may have been made in said agreement, and of the Orders in Council relating thereto. Also for copies of any and all transfers or assignments of said agreement or contract, and of all Orders in Council relating thereto. Presented to the House of Commons, 21st March, 1889.—*Mr. Kenny*.....*Printed for Distribution only.*
- 22h. Return to an Address of the House of Commons, to His Excellency the Governor General, dated 1st April, 1889, for copies of all Orders in Council, correspondence, agreements and settlements, respecting the conveyance of the North Shore Railway to the Government by the Grand Trunk Railway Company, and by the Government to the Canadian Pacific Railway Company. Presented to the House of Commons, 12th April, 1889.—*Mr. Rinfret*...*Not printed.*
- 22i. Return to an Order of the House of Commons, dated 1st April, 1889, for: 1. Copies of the petition asking for the incorporation of the Témiscouata Railway Company. 2. Copies of all correspondence between the Government and this company respecting the granting of a subsidy or having reference to such subsidy. Presented to the House of Commons, 17th April, 1889.—*Mr. Dessaint*.....*Not printed.*

- 22j.** Return to an Order of the House of Commons, dated 1st April, 1889, for a Return of the survey made of the Annapolis and Liverpool Railway, with the report of the engineer, and all papers and correspondence connected therewith. Presented to the House of Commons, 22nd April, 1889.—*Mr. Jones (Halifax)*.....*Not printed.*
- 22k.** Return to an Order of the House of Commons, dated 11th April, 1889, for all papers, reports, returns and correspondence in reference to the condition of the railway subsidized by the Parliament of Canada, extending from the western end of the Derby Branch Railway to a connection with the Northern and Western Railway, in the county of Northumberland, New Brunswick; also all correspondence, &c., had between the Government, or any of its officers, and the proprietors of the said railway, with the object of opening it up and running trains thereon. Presented to the House of Commons, 25th April, 1889.—*Mr. Mitchell*.....*Not printed.*
- 22l.** Return to an Address of the House of Commons, to His Excellency the Governor General, dated 11th March, 1889, for copies of all correspondence between the Government and the Windsor and Annapolis and Western Counties Railway Companies relating to the consolidation, under Government control, of the railways of western Nova Scotia, together with copies of resolutions adopted by the Chamber of Commerce of Halifax, and the Fruit Growers' Association of Nova Scotia, referring to the same subject. Presented to the House of Commons, 25th April, 1889.—*Mr. Borden*.....*Not printed.*
- 22m.** Papers, correspondence, &c., respecting subsidies to certain railway companies, and towards the construction of certain railways, as follows:—St. Césaire to St. Paul d'Abbotsford Railway; Quebec and Murray Bay Railway; South Ontario Pacific Railway; Kingston, Smith's Falls and Ottawa Railway Company; Lake Témiscamingue Railway Company, Mattawa to foot of Long Sault; Shuswap and Lake Okanagan Railway; Chicoutimi Railway; St. Catharines and Niagara Central Railway Company; Grand Trunk, Georgian Bay and Lake Erie Railway Company; Hereford Railway Company; Quebec, Montmorency and Charlevoix Railway; Cornwallis Valley Railway Company; St. Clair Tunnel Company; Drummond County Railway; Pontiac and Renfrew Railway Company; Massawippi Junction Railway; Great Eastern Railway Company; Gananoque, Perth and James' Bay Railway Company, and Thousand Islands Railway Company; Brockville, Westport and Sault Ste. Marie Railway Company; Maskinongé and Lake Nipissing Railway; Napanee, Tamworth and Quebec Railway Company; Joggins Railway Company. Presented to the House of Commons, 29th April, 1889, by Sir John A. Macdonald.....*Printed for Sessional Papers only.*
- 22n.** Copy of the Prospectus of the Chignecto Marine Transport Railway Company, as published in the *London Times*, 19th March, 1889. Presented to the House of Commons, 30th April, 1889, by Hon. G. E. Foster.....*Not printed.*
- 23.** Return to an Order of the House of Commons, dated 16th April, 1888, for a Return of all correspondence, petitions, reports of engineers, and others, regarding the construction of a harbor of refuge at Wellington, Lake Ontario. Presented to the House of Commons, 4th February, 1889.—*Mr. Platt*.....*Not printed.*
- 23a.** Return to an Order of the House of Commons, dated 8th February, 1889, for a copy of engineer's last report on the feasibility of constructing a harbor at Naufrage, King's County, Prince Edward Island. Presented to the House of Commons, 14th March, 1889.—*Mr. McIntyre*—
Not printed.
- 23b.** Return to an Address of the House of Commons, to His Excellency the Governor General, dated 1st April, 1889, for copies of all correspondence between the Dominion Government and the Corporation of Pilots for and below the harbor of Quebec, respecting the change in the present tariff of pilotage dues on vessels for and below the harbor of Quebec. Presented to the House of Commons, 26th April, 1889.—*Mr. Guay*.....*Not printed.*
- 24.** Return to an Order of the House of Commons, dated 16th April, 1888, for a Return of all tenders received by the Government for the supply of coal during the past calendar year, the names of successful tenderers, and the rate per ton in all contracts for coal entered into by the Government during the same period. Presented to the House of Commons, 4th February, 1889.—*Mr. Guillet*.....*Not printed.*
- 25.** Return to an Address of the House of Commons, to His Excellency the Governor General, dated 30th April, 1888, for copies of all correspondence, Orders in Council, reports, papers and documents touching the seizure made on F. O. Vallerand, at Quebec. Presented to the House of Commons, 4th February, 1889.—*Mr. Langelier (Quebec Centre)*.....*Not printed.*

- 25a. Return to an Address of the House of Commons, to His Excellency the Governor General, dated 30th April, 1888, for copies of all correspondence, Orders in Council, papers and documents respecting the seizure of diamonds and other precious stones effected at Quebec on one David Levi, and the cancelling of the said seizure. Presented to the House of Commons, 4th February, 1889.—*Mr. Langelier (Quebec Centre)*..... *Not printed.*
26. Statement of Governor General's Warrants issued and expenditure made under same, since last Session of Parliament, in accordance with Consolidated Revenue and Audit Act, sec. 32, sub-section 2. Presented to the House of Commons, 4th February, 1889, by Hon. G. E. Foster..... *Not printed.*
27. Statement of all superannuations and retiring allowances in the Civil Service, giving the name and rank of each person superannuated or retired, his salary, age and length of service, his allowance and cause of retirement, whether vacancy has been filled by promotion or new appointment, &c., for year ended 31st December, 1888. Presented to the House of Commons, 4th February, 1889, by Hon. G. E. Foster..... *Printed for Sessional Papers only.*
28. Statement of Expenditure under authority of 51 Victoria, cap. 1, on account of Miscellaneous Unforeseen Expenses, from 1st July, 1888, to 31st January, 1889. Presented to the House of Commons, 4th February, 1889, by Hon. G. E. Foster..... *Not printed.*
29. Report of the Commissioner, Dominion Police, under Revised Statutes of Canada, chapter 184, section 5. Presented to the House of Commons, 1st February, 1889, by Sir John Thompson
Not printed.
30. Return to an Address of the Senate, to His Excellency the Governor General, dated 8th May, 1888, for copies of all Orders in Council, resolutions, correspondence or other documents on the subject of the granting of any subsidy or aid to the Pontiac Pacific Junction Railway Company. Presented to the Senate, 6th February, 1889.—*Hon. Mr. Trudel*..... *Not printed.*
31. List of Public Officers to whom Commissions have issued under the provisions of chapter 19 of the Revised Statutes of Canada, during the year 1888. Presented to the House of Commons, 11th February, 1889, by Sir Hector Langevin *Not printed.*
32. Return to an Order of the House of Commons, dated 6th February, 1889, for a Return of the Receipts and Expenditures, in detail, chargeable to the Consolidated Fund, from the 1st day of July, 1888, to 1st February, 1889, with comparative statement of the same from 1st July, 1887, to 1st February, 1888. Presented to the House of Commons, 12th February, 1889—*Sir Richard Cartwright*..... *Not printed.*
33. Return to an Order of the House of Commons, dated 6th February, 1889, for copies of all papers and documents furnished the Government by the board of Examiners in connection with the recent examinations of candidates for the office of Hide and Leather Inspector in the city of Montreal. Presented to the House of Commons, 12th February, 1889.—*Mr. Curran*—
Not printed.
34. Copy of Order in Council making certain regulations under the provisions of chapter 121 of the Revised Statutes of Canada, respecting Government Savings Banks. Presented to the House of Commons, 12th February, 1889, by Hon. G. E. Foster..... *Not printed.*
35. Detailed statement of all Bonds or Securities registered in the Department of the Secretary of State of Canada, submitted to the Parliament of Canada under section 23, chapter 19, of the Revised Statutes of Canada. Presented to the House of Commons, 14th February, 1889, by Sir Hector Langevin *Not printed.*
36. Return (*in part*) under Resolution of the House of Commons, passed on the 20th February, 1882, on all subjects affecting the Canadian Pacific Railway, respecting details as to: 1. The selection of the route. 2. The progress of the work. 3. The selection or reservation of land. 4. The payment of moneys. 5. The laying out of branches. 6. The progress thereof. 7. The rates of tolls for passengers and freight. 8. The particulars required by the Consolidated Railway Act and amendments thereto, up to the end of the previous fiscal year. 9. Like particulars up to the latest practicable date before the presentation of the Return. 10. Copies of all Orders in Council and all correspondence between the Government and the railway company, or any member or officer of either, relating to the affairs of the company. Presented to the House of Commons, 15th February, 1889, by Hon. E. Dewdney—
Printed for Sessional Papers only.
- 36a. An agreement with the Canadian Pacific Railway Company for the performance of a railway service in the province of New Brunswick. Presented to the House of Commons, 22nd April, 1889, by Sir John A. Macdonald..... *Printed for Sessional Papers only.*

- 36b.** Supplementary Return under Resolution of the House of Commons, passed on the 20th February, 1882, on all subjects affecting the Canadian Pacific Railway, respecting details as to: 1. The selection of the route. 2. The progress of the work. 3. The selection or reservation of land. 4. The payment of moneys. 5. The laying out of branches. 6. The progress thereon. 7. The rate of tolls for passengers and freight. 8. The particulars required by the Consolidated Railway Act, and amendments thereto, up to the end of the previous fiscal year. 9. Like particulars up to the latest practicable date before the presentation of the Return. 10. Copies of all Orders in Council and all correspondence between the Government and the Railway Company, or any member or officer of either, relating to the affairs of the Company. Presented to the House of Commons, 30th April, 1889, by Hon. E. Dewdney. *Printed for Sessional Papers only.*
- 37.** Return to an Order of the House of Commons, dated 8th February, 1889, for a Return showing: 1st. The full amount of legal and other expenses paid in connection with the suit, "The St. Catharines Milling and Lumbering Company vs. the Queen," from the commencement of the suit up to the 1st January, 1889. 2nd. The party or parties to whom paid, the amounts paid, and date of payment. Presented to the House of Commons, 19th February, 1889.—*Mr. McMullen*..... *Not printed.*
- 37a.** Return to an Address of the House of Commons to His Excellency the Governor General, dated 1st April, 1889, for all the original cheques given in payment of all fees or expenses connected with the suit, "The St. Catharines Milling and Lumbering Company vs. the Queen." Presented to the House of Commons, 17th April, 1889.—*Mr. McMullen*..... *Not printed.*
- 38.** Return to an Order of the House of Commons, dated 6th February, 1889, for a Return, in the form used in the statements usually published in the *Gazette*, of the exports and imports from the 1st day of July, 1888, to the 1st day of January, 1889, distinguishing the products of Canada and those of other countries, with comparative statement of the same from 1st July, 1887, to 1st January, 1888. Presented to the House of Commons, 19th February, 1889.—*Sir Richard Cartwright*..... *Not printed.*
- 39.** Return to an Order of the House of Commons, dated 8th February, 1889, for a Return showing the quantity of wheat and flour imported into the Dominion of Canada from the United States, and entered for consumption, during the six months ending 31st December, 1888; also the quantity of flour remaining in bond in Canada on the 31st December, 1888. Presented to the House of Commons, 19th February, 1889.—*Mr. McMullen*..... *Not printed.*
- 40.** Return to an Order of the House of Commons, dated 8th February, 1889, for a Return showing amounts received on account of loan recently negotiated, together with a statement of the sums (forming portion of the same) placed on deposit with Canadian or other banks since the 20th day of June, 1888, and the rate of interest agreed to be paid on the same. Presented to the House of Commons, 20th February, 1889.—*Sir Richard Cartwright*—
Printed for Distribution only.
- 40a.** Statement of the affairs of the British Canadian Loan and Investment Company, on the 31st December, 1888. Presented to the House of Commons, 27th April, 1889, by Hon. Mr. Speaker..... *Not printed.*
- 41.** Return of the affairs of the Collingwood Marine and General Hospital for the year 1888. Presented to the House of Commons, 27th April, 1888, by Hon. Mr. Speaker..... *Not printed.*
- 42.** Return to an Order of the House of Commons, dated 7th May, 1888, for copies of all papers, plans, letters, reports, and other documents whatsoever in relation to the building of a pier or wharf at Ste. Aune des Monts, in the county of Gaspé. Presented to the House of Commons, 28th February, 1889.—*Mr. Joncas*..... *Not printed.*

CONTENTS OF VOLUME No. 15.

- 43.** Return to an Order of the House of Commons, dated 16th April, 1888, for a Return showing separately in regard to companies doing business under Dominion License, the amount of fire insurance at risk on the 31st December, for each of the years from 1881 to 1887, both inclusive, the number of policies in force, the total amount of cash paid each year and the total amount of expenses for each year, the percentage of losses and expenses to premium income, and the expense per \$1,000 at risk. Presented to the House of Commons, 28th February, 1889.—*Mr. Bowman*..... *Printed for both Distribution and Sessional Papers.*

- 43b. Return to an Order of the House of Commons, dated 13th March, 1889, for copies of all correspondence between the Manufacturers' Insurance Company and the Superintendent of Insurance respecting the list of stockholders of said company furnished by the said company in accordance with the statute in that behalf. Presented to the House of Commons, 20th March, 1889.—*Mr. Lister*..... *Not printed.*
44. Return to an Order of the House of Commons, dated 8th February, 1889, for copies of all correspondence between the Minister of the Interior and any officials of his Department, and Thomas Sioni and others, Indians of the Huron tribe of Lorette. Presented to the House of Commons, 28th February, 1889.—*Mr. Langelier (Montmorency)*..... *Not printed.*
- 44a. Return to an Order of the House of Commons, dated 25th February, 1889, for a Return of all sales made of Indian lands on the west side of the Grand River, in the village of Cayuga, in the county of Haldimand; copies of all instructions given to the valuers of said lands, the reports of said valuers, and all correspondence and papers relating thereto. Presented to the House of Commons, 21st March, 1889.—*Mr. Colter*..... *Not printed.*
- 44b. Return to an Order of the House of Commons, dated 1st April, 1889, for copies of all tenders for the supply of beef for the Blackfeet, Blood and Piegan Indian Agencies, and all papers and correspondence connected with the calling for such tenders, and the awarding of contracts for such supplies during the summer of 1888. Presented to the House of Commons, 18th April, 1889.—*Mr. Edgar*..... *Not printed.*
- 44c. Return to an Address of the House of Commons, to His Excellency the Governor General, dated 1st April, 1889, for copies of all correspondence since the 1st of January, 1888, between the Government of the Dominion and the province of Ontario, relating to the arrears of annuities due to the Indians who surrendered their lands under the Robinson Treaty, and to the grant of a reserve to the Chippewa Band of Lake Temiscamingue. Presented to the House of Commons, 30th April, 1889.—*Mr. O'Brien*..... *Not printed.*
45. Return to an Order of the House of Commons, dated 8th February, 1889, for a Return showing the amount, respectively, of pine and spruce sawlogs, board measure, exported in each year from 1867 to 30th June, 1888; the amount of export duty collected in each year from each class of logs; the rate of duty in each year upon each kind of logs, and the amount of export of each kind of logs, and the amount of duty collected upon the same, by provinces. Presented to the House of Commons, 1st March, 1889.—*Mr. Charlton*..... *Not printed.*
- 45a. Return to an Order of the House of Commons, dated 25th February, 1889, for a Return of amount of export duty collected or paid on sawlogs and on other lumber in the year 1888, specifying at what custom house such duty was paid, and the respective amounts paid at each custom house. Presented to the House of Commons, 12th March, 1889.—*Mr. Weldon (St. John)*..... *Not printed.*
- 45b. Supplementary Return to an Order of the House of Commons, dated 16th April, 1888, for a statement showing total cost of construction of various works for the descent of timber and sawlogs on the Ottawa river and its tributaries, up to the 30th June last; also statement showing the yearly expenditure for the maintenance of the said works for five years preceding the 30th June last, under the different heads of reconstruction, repairs and cost of management, at each of the stations, with the names of river or tributary where the same was expended; likewise copies of any or all applications, whether from individuals or chartered companies, to acquire by purchase or otherwise all or any portion of said works and improvements on the said Ottawa river and tributaries thereof. Presented to the House of Commons, 21st March, 1889.—*Mr. Amyot*. Presented to Senate, 22nd March, 1889.—*Hon. Mr. Clemon*..... *Not printed.*
46. Return to an Address of the House of Commons, to His Excellency the Governor General, dated 6th February, 1889, for copies of all Orders in Council, reports, correspondence and papers relating to the dismissal of the Hon. William Ross from the Collectorship of Customs at the port of Halifax. Presented to the House of Commons, 1st March, 1889.—*Hon. W. Laurier*..... *Not printed.*
- 46a. Return to an Order of the House of Commons, dated 20th March, 1889, for a Return of all correspondence between the Minister of Marine and Fisheries, Ottawa, and A. Lord, Esq., Agent, Charlottetown, Prince Edward Island, or any other person, having reference to the dismissal of Capt. Ronald Campbell, Harbor Master for Summerside. Also copy of all complaints made against the said Capt. Ronald Campbell, showing by whom made, with copy of evidence touching said dismissal. Presented to the House of Commons, 8th April, 1889.—*Mr. Perry*..... *Not printed.*

- 47.** Return to an Address of the House of Commons, to His Excellency the Governor General, dated 25th February, 1889, for copies of all Orders in Council, correspondence and other documents respecting the disallowance of Acts passed by the province of Quebec in 1887. Presented to the House of Commons, 7th March, 1889.—*Mr. Langelier (Montmorency)*..... *Not printed.*
- 47a.** Return to an Address of the House of Commons, to His Excellency the Governor General, dated 25th February, 1889, for copies of all Orders in Council, correspondence and other documents in relation to the disallowance of the Act for the conversion of the debt. Presented to the House of Commons, 20th March, 1889.—*Mr. Langelier (Montmorency)*.—
Not printed.
- 47b.** Return to an Address of the House of Commons, to His Excellency the Governor General, dated 25th February, 1889, for copies of all Orders in Council, correspondence and other documents respecting the disallowance of the Act respecting the Bar of the province of Quebec, passed in 1886; in which Act the *Battonnier Général* was granted precedence over all other lawyers. Presented to the House of Commons, 21st March, 1889.—*Mr. Langelier (Montmorency)*..... *Not printed.*
- 47c.** Return (*in part*) to an Address of the House of Commons, to His Excellency the Governor General, dated 25th February, 1889, for copies of all Orders in Council, correspondence and other documents in relation to the disallowance of the Act respecting magistrates. Presented to the House of Commons, 21st March, 1889.—*Mr. Langelier (Montmorency)*.—
Not printed.
- 48.** Return to an Order of the House of Commons, dated 25th February, 1889, for a Return showing the date at which *Mr. Speaker* received the certificate of the Judge in each of the following cases—in the election trial of Halton, Shelburne, Northumberland (East), Haldimand, Joliette, Cumberland and Kent; the date of the Speaker's warrant, and the date of the writ for a new election. Presented to the House of Commons, 8th March, 1889.—*Mr. Mills (Bothwell)*..... *Not printed.*
- 49.** Return to an Order of the House of Commons, dated 25th February, 1889, for copies of all correspondence with the Department of Railways and Canals on the subject of the late break in the Cornwall Canal, and of all plans and suggestions by civil engineers and others for the prevention of the recurrence of such break, and the report of John Page, the Chief Engineer of Canals, thereon. Presented to the House of Commons, 8th March, 1889.—*Mr. Bergin*.—
Printed for both Distribution and Sessional Papers.
- 49a.** Return to an Order of the House of Commons, dated 25th February, 1889, for copies of all reports of the engineers and other officers employed by the Department of Railways and Canals on the subject of water power in the new Welland Canal. Presented to the House of Commons, 14th March, 1889.—*Mr. Rykert*..... *Not printed.*
- 49b.** Return to an Order of the House of Commons, dated 25th February, 1889, for copies of the several tenders and all papers, letters and contract for the construction of the Sault Ste. Marie Canal. Presented to the House of Commons, 19th March, 1889.—*Mr. McMullen*.—
Not printed.
- 49c.** Return to an Order of the House of Commons, dated 25th February, 1889, for copies of all the correspondence with the Department of Railways and Canals in connection with the opening of the canals of the Dominion for Sunday traffic. Also a statement of the number of steamboats and vessels passing through the several canals between the date of the order permitting the same and the close of navigation in the year 1888. Also copies of all instructions to the superintendents of the several canals. Presented to the House of Commons, 29th March, 1889.—*Mr. Rykert*..... *Not printed.*
- 49d.** Return to an Address of the Senate to His Excellency the Governor General, dated 26th March, 1888, praying that His Excellency will cause to be laid before this House, a detailed statement of all expenditure in maintaining, repairing, and operating the Welland Canal for the years 1870, 1877, 1885, 1886, 1887, and to the first day of January, 1888, giving the names of all employees, the amount paid each as salary or wages, the number of days each was employed, keeping each month separate, the amount of allowance, if any, for house rent, horse hire or travelling expenses to superintendent, deputy superintendents, foremen or overseers, also the duties performed by each employe, and hour, and where employed; if deputy superintendents, giving that portion of canal under the charge of each; if foremen or overseers, giving on what part or section of canal they are employed; if lock masters, giving the number of lock; if bridge tender, giving the name of bridge; if carpenters, masons or laborers,

- giving the division or portion of canal on which employed, keeping separate the expenditure and names of employees on what is known as the old and the new canal as far as possible. Also copies of all time-lists, pay-lists, and vouchers used in paying the employees, keeping each month separate for the above-named years. Also copies of all tenders received by the Government for the erection of the custom house and post office building at Port Colborne. Also copies of plans and specifications, and a detailed statement of material used in, and the cost of erecting the said building in the year 1887. Also copies of all correspondence between the Minister of Railways and Canals, or any officer of his Department, and the Superintendent of the Welland Canal, giving instructions for erecting the custom house and post office at Port Colborne. Also copies of all correspondence and of plans and specifications and instructions to the Superintendent of the Welland Canal by the Minister of Railways and Canals, or any officer of that Department, for the erection of a wharf or dock west of the lock in Port Colborne. Also a detailed statement of the material used and cost of said wharf or dock. Also giving the purposes said wharf or dock was built for, and what it is used for. Also a detailed statement of the cost of wrecking pump purchased for the Welland Canal, giving the date of purchase, the number of days the said pump has been used in each year, and date of such service for canal purposes; if for private purposes, giving the date of such service and the amount received by the Government for such service. Also giving a detailed statement of the cost of diving armor purchased for the Welland Canal, and giving the number of days it has been used and date of such service in each year. Also giving a detailed statement of the amount received by the Government for the use of said diving armor when used for private purposes and not for the Government service. Presented to the Senate, 5th April, 1889.—*Hon. Mr. McCallum* Printed (in part) for Sessional Papers only.
- 49c. Return to an Address of the House of Commons, to His Excellency the Governor General, dated 1st April, 1889, for copies of all tenders received for the construction of the Sault Ste. Marie Canal, with accompanying documents, including the approximate quantities on which such tenders were computed, and the gross amounts; and all correspondence, reports and Orders in Council, in relation to the same. Presented to the House of Commons, 12th April, 1889.—*Mr. Trow*..... Not printed.
- 49f. Return to an Order of the House of Commons, dated 18th March, 1889, for copies of reports, plans and surveys of the then proposed Cornwall Canal by J. B. Mills and Benjamin Wright, Esq's, Civil Engineers and by Capt. P. Cole, Royal Engineers, in the years 1832, 1833 and 1834; also for survey and report of Colin Carman, Esq., C.E., of a proposed change of location of Cornwall Canal, from Sand Bridge through Hoopes Creek to Archibald's Point, with plans, profile and estimates; also reports, plans and surveys made by Mr. Clowes, C.E., in 1826. Presented to the House of Commons, 17th April, 1889.—*Mr. Bergin*—
Printed for both Distribution and Sessional Papers.
- 49g. Return to an Order of the House of Commons, dated 25th February, 1889, for a Return of report of Engineer Crawford in 1877-78 and all subsequent reports made on the Beauharnois Canal; also reports of engineers made on the North Shore of the St. Lawrence between lakes St. Francis and St. Louis; also resolutions, letters, &c., of boards of trade, corporations, and even from individuals, regarding such works. Presented to the House of Commons, 17th April, 1889.—*Mr. Bergeron*..... Not printed.
- 49h. Return to an Order of the House of Commons, dated 13th March, 1889, for a Return showing :
1. Statement of cases in which all or any of the tenders called for and received within five years, for any work in connection with canals, were rejected on the report of the Chief Engineer of Canals, giving names of tenderers and gross amount of each tender; with copies of all such reports of the Chief Engineer, giving reasons for such rejection, and noting the cases in which new tenders were called for. 2. In cases where new tenders were called for, a statement of names of tenderers and gross amount of each tender, noting which tender was accepted, and giving copies of any reports or other reasons for the rejection of lower tenders, if any. 3. Statement of cases in which claims for extras have arisen and have been referred to the sole arbitration of the Chief Engineer of Canals, showing amounts paid to claimants under his award, and a detailed statement of costs paid by the Government or the other parties to the suit in connection with the arbitration in each case, and to whom paid. Presented to the House of Commons, 17th April, 1889.—*Mr. Casey*..... Not printed.

- 49i.** Return to an Address of the House of Commons, to His Excellency the Governor General, dated 1st April, 1889, for copies of all tenders received by the Department of Railways and Canals, in September and October, 1888, for the enlargement of the Cornwall and Galops Canal, including the approximate quantities on which such tenders were computed, and the gross amounts; and all correspondence, reports, and orders in Council, relating to the same, since the receipt of such tenders. Presented to the House of Commons, 25th April, 1889.—*Mr. Trow*..... *Not printed.*
- 50.** Copies of General Orders No. 84 and No. 85, of the Supreme Court of Canada. Presented to the House of Commons, 14th March, 1889, by Sir John Thompson—
Printed for Distribution only.
- 51.** Return to an Order of the House of Commons, dated 25th February, 1889, for copies of all correspondence, reports, &c., between the officials of the Intercolonial Railway and Mr. Louis Fortin, of St. Octave de Mévis, in relation to the killing of a horse by the cars in October, 1888. Presented to the House of Commons, 15th March, 1889.—*Mr. Fiset*..... *Not printed.*
- 51a.** Return to an Address of the House of Commons, to His Excellency the Governor General, dated 1st April, 1889, for a Return of Orders in Council relating to the division of the subsidy of \$250,000 to the International Railway Company, between the different portions of the road, say, from the St. Lawrence to Lennoxville, from Lennoxville to Moose River and Mattawamkeag, from Mattawamkeag to Harvey's Station, and from Harvey to Salisbury, giving the number of miles in each division, and the amount apportioned thereto. Presented to the House of Commons, 12th April, 1889 —*Mr. Jones (La ifaz)*—
Order in Council printed, for Sessional Papers only.
- 51b.** Return to an Order of the House of Commons, dated 8th April, 1889, for copies of all correspondence between Mr. Allan Knight, or his solicitor, with the Government of Canada, or any of its officers, in reference to a claim for damages in connection with the Indian Town branch of the Intercolonial Railway, and also any report from any of the Government officers in reference to the same subject. Presented to the House of Commons, 29th April, 1889.—*Mr. Mitchell*..... *Not printed.*
- 51c.** Return to an Order of the House of Commons, dated 11th April, 1889, for copies of all letters, reports and correspondence had between Mr. George R. Parker and the Government, or any of its officers; and also between the Government and its officers, in relation to claims for land, and damages, in connection with the Derby Branch Railway. Presented to the House of Commons, 29th April, 1889.—*Mr. Mitchell*..... *Not printed.*
- 52.** Return to an Order of the House of Commons, dated 6th February, 1889, for a Return of the names of all chaplains of public institutions under appointment of the Government, together with the dates of their appointment, the amount of their salaries, and the religious denominations to which they belong. Presented to the House of Commons, 15th March, 1889.—*Mr. Innes*..... *Not printed.*
- 53.** Return to an Order of the House of Commons, dated 25th February, 1889, for a Return showing what sums of money have been paid by the Government to W. A. Webster during each of the financial years, 1887 and 1888, and since the 1st July, 1888, specifying the services for which he was paid. Presented to the House of Commons, 18th March, 1889.—*Mr. Colter*—
Not printed.
- 54.** Copy of the Bill, 51-52 Victoria, chapter 13, Quebec, intituled: "An Act respecting the settlement of the Jesuits' Estates;" copies of the report made on the 16th January last, or any other date, to His Excellency the Governor General upon the said Act; all Orders in Council, reports, opinions or other papers showing the consideration and conclusion arrived at by the Government in regard to the said Act; all correspondence in relation to the said Act had between the Government and the Government of the Province of Quebec, or any other person or persons whomsoever; as well as all petitions or written representations made to the Government for or against the said Act becoming law, and showing at what date the said Bill was received by the Government and approved of by them. Presented to the House of Commons, 19th March, 1889, by Sir John A. Macdonald—
Printed for both Distribution and Sessional Papers.

55. Return to an Order of the House of Commons, dated 4th March, 1889, for a Return of copies of all petitions presented to the Government by the residents of the townships of the front of Yonge and the front of Escott, in the county of Leeds, Ontario, praying that an Act passed by the Local Legislature of the province of Ontario, assented to the 23rd March, 1888, intituled: "An Act to provide for the union of the townships of the front of Yonge and front of Escott," might be disallowed. Presented to the House of Commons, 19th March, 1889.—*Mr. Taylor*—*Not printed.*
56. Return to an Address of the House of Commons, to His Excellency the Governor General, dated 11th March, 1889, for a statement or Return of the Government in answer to the request of the Home Government for information as to the working of "The Canada Temperance Act" in the several provinces of the Dominion. Presented to the House of Commons, 19th March, 1889.—*Mr. Jamieson* *Not printed.*
57. Return to an Order of the House of Commons, dated 8th February, 1889, for a Return showing what repairs have been done to the dredge "Prince Edward" during the year 1888, the date of commencement of work, and when finished, with cost of said work; also the amount of work done by said dredge during the year 1888. Presented to the House of Commons, 19th March, 1889.—*Mr. Perry*..... *Not printed.*
58. Return to an Order of the House of Commons, dated 4th March, 1889, for a copy of the names of fishermen in Prince Edward Island who, for the years 1886 and 1887, have made claims for the fishery bounty, and whose claims have been rejected; also for copies of the reports of the officers or parties against such claims, and the names and residences of such officers or parties. Presented to the House of Commons, 19th March, 1889.—*Mr. McIntyre*..... *Not printed.*
- 58a. Return to an Address of the House of Commons, to His Excellency the Governor General, dated 13th February, 1889, for a Return of all correspondence between the Government of the Dominion and the Government of Ontario in respect to the expediency of permitting net fishing by white men in the inland waters of Ontario, north and north-west of Lakes Huron and Superior. Also of all correspondence between the Indian Department and any other department of the Government in regard to the distress and destitution which would be brought upon the resident Indian population by unrestricted net fishing in the waters from which they derive their chief means of subsistence. Presented to the House of Commons, 20th March, 1889.—*Mr. Dawson*..... *Not printed.*
- 58b. Return to an Order of the House of Commons, dated 20th March, 1889, for: 1. Copies of any order or regulation adopted by the Department of Marine and Fisheries with a view to regulate fishing, and to put in force a system of licensing and taxing of fishing utensils in the counties of Berthier, Maskinongé, St. Maurice, Richelieu, Yamaska and Nicolet, during the two years ending 31st December, 1888. 2. Copies of all instructions forwarded during the period aforesaid to the fishery overseers having jurisdiction in the said counties, respecting the enforcement, suspension, modification or re-enactment of the said regulation. 3. Copies of all reports and information furnished by the fishery overseers to the Department of Marine and Fisheries in relation to the enforcement of the said regulation. 4. A list of all the fishermen of each of the said counties as furnished by the fishery overseers, showing those who took out the license so required, the amount paid by each of them, the total amount received as the product of the said licenses from the date of the enforcement of the said regulation up to 31st December, 1888, and also those who did not take out the license so required, and whose fishing utensils were confiscated or not, as the case may be. 5. Copies of all letters, petitions and correspondence addressed to the Government, or any of its members, asking for the repeal of the said regulation and the abolition of the said license, of all answers made thereto, and of all other documents relating to the matter. Presented to the House of Commons, 17th April, 1889.—*Mr. Beausoleil*..... *Not printed.*
- 58c. Return to an Order of the House of Commons, dated 1st April, 1889, for copies of correspondence between the Government and the holders of fishing rights under permit in river Matane, and of correspondence on the same subject with the riparian proprietors, and reports on their opposition to permits, &c. Presented to the House of Commons, 30th April, 1889.—*Mr. Casgrain*..... *Not printed.*
59. Return to an Order of the House of Commons, dated 25th February, 1889, for a Return showing: 1. In what ports of the Dominion the Government collect hospital dues on ships. 2. What amount was collected in each of the said ports during last season. 3. How many seamen

- were under treatment in each of the said ports during the season. 4. How much the Government have paid to the hospitals of the several ports during last season. Presented to the House of Commons, 21st March, 1889.—*Mr. Lépine*.....*Not printed.*
60. Continuation of the correspondence as published in the Auditor-General's Report, on the subject of carrying forward the gross amount of the Loan and Sinking Fund of the Consolidated Canadian Loan Converted. Presented to the House of Commons, 20th March, 1889, by Hon. G. E. Foster.....*Not printed.*
61. Return to an Address of the House of Commons, to His Excellency the Governor General, dated 11th March, 1889, for copies of all correspondence between the Government and the Lieut.-Governor of the North-West Territories, together with any papers, reports and documents in reference to the issue of permits or licenses for the sale of spirituous liquors, beer or other intoxicants, in public houses or otherwise in the North-West Territories; also copies of all regulations, documents or other proceedings issued or adopted by the Lieut.-Governor of the North-West Territories, under which licenses or permits for the sale of beer or other intoxicants in public houses have been granted in the said Territories. Presented to the House of Commons, 21st March, 1889.—*Mr. Jamieson*.....*Not printed.*
62. Return to an Order of the House of Commons, dated 25th February, 1889, for a Return showing the amount of money paid on account of work performed or material furnished for opening or improving public roads or streets in the city of Ottawa, from the 1st of July, 1888, to the 1st January, 1889; the names of the party or parties to whom paid, for what paid, and the amount; the name or names of all parties in charge as inspectors or superintendents, and amount per day or month paid to them. Presented to the House of Commons, 22nd March, 1889.—*Mr. McMullen*.....*Not printed.*
- 62a. Return to an Order of the House of Commons, dated 1st April, 1889, for copies of all petitions, correspondence and documents respecting the extension of McMahon Street through the Ordnance land, in the city of Quebec, to D'Aiguillon Street. Presented to the House of Commons, 2nd May, 1889.—*Mr. Guay*.....*Not printed.*
63. Return to an Order of the House of Commons, dated 20th February, 1889, for a Return showing the cost, to date, of the barn at the Experimental Farm, or of any and all other outbuildings upon the said farm, with a statement showing the number of outbuildings and their kind, if any; also the number of residences built on the farm and the cost of each one separately; likewise the sum total of the cost of all buildings upon said farm, to date. Presented to the House of Commons, 2nd April, 1889.—*Mr. McMillan (Huron)*.....*Not printed.*
64. Return to an Order of the House of Commons, dated 25th February, 1889, for a Return showing public buildings erected in various places throughout the Dominion from 1st July, 1867, to 1st January, 1889; giving date of first appropriation made for same, locality in which erected, and total cost to date of 1st January, 1889. Presented to the House of Commons, 3rd April, 1889.—*Sir Richard Cartwright*.....*Printed for Sessional Papers only.*
65. Return to an Address of the House of Commons, to His Excellency the Governor General, dated 7th February, 1889, for copies of the Resolutions passed at the conference held in 1887, at the city of Quebec, of delegates from the several provinces of Ontario, Quebec, Nova Scotia, New Brunswick and Manitoba; and of all papers and correspondence relating thereto. Presented to the House of Commons, 3rd April, 1889.—*Mr. Egar*.....*Not printed.*
66. Return to an Order of the House of Commons, dated 25th February, 1889, for a Return showing the total amount of expense incurred and moneys paid up to 1st January, 1889, on account of the preparation, publication and completion: 1. Of the various lists under the Dominion Franchise Act upon which the last general election was held; and stating: (a) The total amount paid for printing; (b) The total amount paid to revising barristers; (c) The total amount paid to revising barristers, clerks and bailiffs; (d) The total amount paid for all other expenses in connection with preparation, publication and completion of the said lists; (e) Whether any claims against the Government in connection with the preparation of the lists are yet unsettled. 2. Showing the expense incurred up to 1st February, 1889, in connection with the preparation of the second voters' list under the Dominion Franchise Act, and stating: (a) The total cost of type used, or to be used, in setting up the lists; (b) The amount paid for composition in setting up the lists; (c) The cost of paper and presswork in preparation of the lists; (d) The cost or rental of plant used in connection with the preparation of said lists up to the above date; (e) Amount of all other expenses incurred in connection with the preparation of the said lists up to 1st February, 1889. Presented to the House of Commons, 3rd April, 1889.—*Mr. Charlton*.....*Printed for Sessional Papers only.*

67. Return to an Address of the Senate, to His Excellency the Governor General, dated 22nd March, 1889, praying that His Excellency will cause to be laid before this House, copies of leases or existing arrangements permitting the occupancy of the reserve of public property on the Ottawa River, from Bay to Kent Street, in the city of Ottawa. Presented to the Senate, 3rd April, 1889.—*Hon. Mr. Clemow*..... *Not printed.*
68. Return to an Address of the Senate, to His Excellency the Governor General, dated 19th March, 1889, for a list giving the names of the veterans of the war of 1812, actually living, with their place of residence and the amount of their respective pensions. Presented to the Senate, 10th April, 1889.—*Hon. Mr. Guévrement*—
Printed for both Distribution and Sessional Papers.
69. Return to an Order of the House of Commons, dated 25th February, 1889, for a Return of all evidence, papers and correspondence relating to the liability of the Government to construct, or to aid in constructing, a bridge across the Grand River, at the village of York, in the county of Haldimand. Presented to the House of Commons, 11th April, 1889.—*Mr. Colter*—
Not printed.
- 69a. Return,—Correspondence, &c., in connection with tenders called for and received for bridge at Grand Narrows, Cape Breton Railway. Presented to the House of Commons, 17th April, 1889, by Sir John A. Macdovald..... *Not printed.*
- 69b. Return to an Order of the House of Commons, dated 11th March, 1889, for a Return of copies of all petitions presented to the Government by the residents of the township of the front of Young, county of Leeds, Ont., praying that Jones' Creek in said township be declared a non-navigable stream, and to allow the municipal council to build a low solid bridge across said stream. Also copies of the report of the engineer on the same. Presented to the House of Commons, 29th April, 1889.—*Mr. Taylor*..... *Not printed.*
70. Return to an Order of the House of Commons, dated 1st April, 1889, for copies of all correspondence, reports, petitions and other documents, up to this date, between the Post Office Department and the Post Office Inspector for the district of Montreal, Mr. King, and any other persons, respecting a change in the location of the post office of Belle Vallée, in the county of St. John's. Presented to the House of Commons, 17th April, 1889.—*Mr. Bourassa*.—
Not printed.
71. Return to an Order of the House of Commons, dated 18th March, 1889, for a Return of all correspondence between the Government and the officers and men of the 15th Battalion, respecting aid to construct a drill shed at Belleville, and for any reports made to the Government respecting the desirability of granting such aid. Presented to the House of Commons, 2nd May, 1889.—*Mr. Burdett*..... *Not printed.*
72. Return to an Order of the House of Commons, dated 25th February, 1889, for a Return showing the amount of duty collected upon baskets and boxes containing fruits admitted free of duty since 1st May, 1888. Presented to the House of Commons, 17th April, 1889.—*Mr. Charlton*..... *Not printed.*
73. General Rules of the Maritime Court of Ontario. Presented to the House of Commons, 20th April, 1889, by Sir John Thompson..... *Not printed.*
74. Return to an Address of the Senate, to His Excellency the Governor General, dated 1st April, 1889, praying that His Excellency will be pleased to cause to be laid before this House, a detailed statement showing the total annual cost for supplying the electric light for the use of the Intercolonial Railway and charging the cars with electricity at the respective stations of St. John and Halifax, and the names of the parties performing such service. Presented to the Senate, 23rd April, 1889.—*Hon. Mr. Botsford*..... *Not printed.*
75. Return to an Order of the House of Commons, dated 11th April, 1889, for copies of all papers and correspondence in connection with a claim of Messrs. A. and J. Adams for loss incurred by the wreck of their vessel, "Carrier Dove," caused by the change of lights at Crapaud Harbor, without due notice to the public. Presented to the House of Commons, 23rd April, 1889.—*Hon. Mr. Mitchell*..... *Not printed.*
76. Return to an Address of the Senate, to His Excellency the Governor General, dated 10th April, 1889, praying that His Excellency will be pleased to cause to be laid before this House, a copy of the report made to the Minister of Public Works, by the commissioners on the floods in the St. Lawrence River. Presented to the Senate, 25th April, 1889.—*Hon. Mr. Drummond*..... *Printed for both Distribution and Sessional Papers.*

77. Certified copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council on the 5th September, 1888, relating to Appeals in Criminal Cases to the Judicial Committee of Her Majesty's Privy Council. Presented to the House of Commons, 26th April, 1889, by Hon. G. E. Foster.....*Printed for Sessional Papers only.*
78. Return to an Order of the House of Commons, dated 9th April, 1888, for copy of the correspondence having reference to the translation into French of the "Field Exercise," from 23rd July, 1879, which has passed between the Militia Department and Lieut.-Colonel A. Audet, and also between either of them and the manager of the Compagnie d'Imprimerie Canadienne of Montreal, Benjamin Sulte, Esquire, and Gebbart Berthiaume, and any other person in relation to the said translation. Presented to the House of Commons, 26th April, 1889.—*Mr. Amyot*.....*Not printed.*
79. General statements and returns of baptisms, marriages and burials in the districts of Chicoutimi, Gaspé, Iberville, Joliette, Montmagny and Saguenay, for the year 1888. Presented to the House of Commons, 27th April, 1889, by Hon. Mr. Speaker.....*Not printed.*
80. Return to an Order of the House of Commons, dated 16th April, 1888, for a Return of all Dominion Scrip issued for any purpose in connection with Manitoba and the North-West Territories; the dates and amounts of the several issues, and the purposes for which they were made; the mode or modes of redemption; the amount of each issue so far redeemed, and the balances outstanding on the 1st March, 1888. Presented to the House of Commons, 30th April, 1889.—*Mr. Wilson (Elgin)*.....*Not printed.*
81. Return to an Order of the House of Commons, dated 25th February, 1889, for a Return showing: 1. The number of immigrants that have arrived at the several ports of entry in Canada each year, from 1st July, 1867, to 1st January, 1889, distinguishing their several occupations, with the number in each. 2. The number reported as having settled in Canada, and number that went to United States, in each year. 3. The number received at the several immigration offices in each year during the same period. 4. The amount of money expended annually for immigration purposes. Presented to the House of Commons, 30th April, 1889.—*Mr. Brien*.....*Not printed.*
82. Letter from the Chief Engineer of Public Works respecting the state and condition of the road between the towns of Dundas and Galt. Presented to the House of Commons, 30th April, 1889, by Sir Hector Langevin.....*Not printed.*

CANADA.

ANNUAL REPORT

OF THE

MINISTER OF PUBLIC WORKS

FOR THE

Fiscal Year 1887-88,

ON THE WORKS UNDER HIS CONTROL.

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

Printed by Order of Parliament.



OTTAWA :

PRINTED FOR THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY.

A. SENECAI, SUPERINTENDENT OF PRINTING.

1889.

TABLE OF CONTENTS.

	PAGE
INTRODUCTION.....	xix
DESCRIPTION OF WORK DONE.....	xix
PROVINCE OF NOVA SCOTIA:—	
AMHERST—Public Building.....	xix
ANTIGONISH do	xix
ARICHAT do	xx
ARISAIG—Breakwater.....	xx
BADDECK—Public Building.....	xx
BAYFIELD—Breakwater.....	xx
BAY ST. LAWRENCE—Channel.....	xx
BIG BRAS D'OR—Wharf.....	xx
BIG POND—Wharf.....	xxi
BLUE ROCK—Breakwater.....	xxi
BROAD COVE—Wharf.....	xxi
CHETICAMP—Channel.....	xxi
CLIFTON—(Old Barns) Wharf.....	xxi
CCMEAUVILLE—Wharf.....	xxi
COW BAY—Breakwater.....	xxii
CRANBERRY HEAD—Pier.....	xxii
DIGBY—Pier.....	xxii
EATONVILLE—Wharf.....	xxii
ECONOMY do	xxii
GREAT TANCOOK ISLAND—Pier.....	xxiii
HALIFAX—Examining Warehouse.....	xxiii
Immigration Office.....	xxiii
Quarantine Station.....	xxiii
INGONISH—Harbour.....	xxiii
LISMORE—Wharf.....	xxiii
LITTLE NARROWS—Wharf.....	xxiii
LOWER HORTON—Wharf.....	xxiv
MABOU—Harbour.....	xxiv
MARGARETVILLE—Pier.....	xxiv
METEGHAN COVE do	xxiv
MOIDART—Boat Landing.....	xxiv
McNAIB'S COVE—Breakwater.....	xxiv
NEW GLASGOW—Public Building.....	xxv
NORTH SYDNEY do	xxv
PARRSBORO'—Pier	xxv
PICTOU—Custom House.....	xxv
Marine Hospital.....	xxv
Harbour.....	xxv

	PAGE.
PICTOU—Middle River.....	xxv
PORT HOOD—Wharf.....	xxvi
PORT MOUTON—Mooring Pier.....	xxvi
SOUTH-WEST—Breakwater	xxvi
SALMON RIVER—Harbour.....	xxvi
SAULNIERVILLE—Pier.....	xxvi
SHEET HARBOUR—Wharf.....	xxvi
SPENCER'S ISLAND—Wharf.....	xxvi
SUMMERVILLE—Breakwater.....	xxvii
TROUT COVE (OF CENTREVILLE)—Breakwater.....	xxvii
WALLACE—Harbour.....	xxvii
WESTERN HEAD—Breakwater.....	xxvii
WILLOW COVE do	xxvii
WINDSOR—Post Office Building.....	xxvii
YARMOUTH—Public Building.....	xxviii
. Harbour.....	xxviii
 PROVINCE OF PRINCE EDWARD ISLAND :—	
BELFAST—Pier.....	xxviii
CASCUMPEC—Harbour.....	xxviii
CHARLOTTETOWN—Dominion Building.....	xxviii
HICKEY'S PIER—.....	xxviii
MALPEQUE—Pier.....	xxix
MONTAGUE—Post Office.....	xxix
MURRAY HARBOUR—Pier.....	xxix
NINE-MILE CREEK do	xxix
NEW LONDON—Harbour.....	xxix
NORTH CARDIGAN—Pier.....	xxix
PINETTE—Pier.....	xxix
SOURIS—Breakwater.....	xxx
TIGNISH—Harbour	xxx
VERNON RIVER—Pier.....	xxx
VICTORIA PIER do	xxx
 PROVINCE OF NEW BRUNSWICK :—	
ANDERSON'S HOLLOW—Breakwater.....	xxx
BAIE VERTE—Wharf.....	xxx
BATHURST—Post Office, &c., Building.....	xxx
BELLIVEAU VILLAGE—Wharf.....	xxx
CARLETON—Post Office.....	xxx
CAPE TORMENTINE—Wharf.....	xxx
CHATHAM—Post Office, &c., Building.....	xxx
Quarantine.....	xxxii
CLIFTON—Breakwater.....	xxxii
COCAGNE—Wharf.....	xxxii
DALHOUSIE—Post Office, &c., Building.....	xxxii
Harbour.....	xxxii

	PAGE
DORCHESTER—Maritime Penitentiary.....	xxxii
FREDERICTON—Public Building.....	xxxiii
GRAND ANSE—Breakwater.....	xxxiii
KINGSTON—Marine Hospital.....	xxxiii
PARTRIDGE ISLAND—Pier.....	xxxiii
MONCTON—Post Office.....	xxxiii
NEWCASTLE—Public Building.....	xxxiv
PORTLAND—Post Office.....	xxxiv
RICHIBUCTO—Harbour.....	xxxiv
RIVER MADAWASKA.....	xxxiv
RIVER ST. JOHN.....	xxxiv
ST. JOHN—Custom House.....	xxxv
Marine Hospital.....	xxxv
Post Office.....	xxxv
Savings Bank.....	xxxv
Harbour.....	xxxv
ST. STEPHEN—Public Building.....	xxxv
UPPER SALMON RIVER—Breakwater.....	xxxvi
WILSON'S BEACH, CAMOBELLO—Breakwater.....	xxxvi
WOODSTOCK—Post Office, Custom House, &c.....	xxxvi

PROVINCE OF QUEBEC:—

AYLMER—Post Office.....	xxxvi
BAGOTVILLE—Wharf.....	xxxvii
BERTHIER (EN HAUT)—Ice Pier.....	xxxvii
CAP DE LA MAGDELEINE—Pier.....	xxxvii
CARLETON—Wharf.....	xxxvii
CHICOUTIMI—Marine Hospital.....	xxxvii
COATICOOK—Public Building.....	xxxvii
COTEAU DU LAC—Wharf.....	xxxviii
ETANG DU NORD—Breakwater.....	xxxviii
FLINT'S WHARF—.....	xxxviii
GROSSE ISLE—Quarantine Station.....	xxxviii
HULL—Post Office.....	xxxviii
ILE AUX COUDRES—Wharf.....	xxxviii
ISLE PERROT—Wharf.....	xxxix
ILE VERTE—Block.....	xxxix
JOLIETTE—Post Office, &c., Building.....	xxxix
KAMOURASKA—Wharf.....	xxxix
LAPRAIRIE—Protection Works.....	xxxix
LES EBOULEMENTS—Pier.....	xxxix
L'ISLET—Pier.....	xl
LONGUEUIL—Wharf.....	xl
MARIA INDIAN RESERVE—Roman Catholic Chapel.....	xl
MONTREAL—Armouries.....	xl
Custom House.....	xl

	PAGE
MONTREAL—Examining Warehouse.....	xl
Post Office.....	xl
MURRAY BAY—Wharf.....	xl
NEW CARLISLE—Wharf.....	xl
NEWPORT RIVER—Protection Works.....	xli
PAPINEAUVILLE—Opening Channel.....	xli
PERCÉ—Wharf.....	xli
PIOPOLIS—Wharf.....	xli
PORT DANIEL—Wharf.....	xli
QUEBEC—Citadel.....	xli
Citadel Cliff.....	xli
Custom House.....	xlii
Drill Hall.....	xlii
Immigrant Building.....	xlii
Observatory.....	xlii
Post Office.....	xlii
Queen's Wharf Building.....	xlii
RIVER CABANO.....	xlii
RIVER CHATEAUGUAY—Deepening Channel.....	xlii
RIVER DU LIÈVRE—Lock and Dam.....	xlii
RIVER DU LOUP (EN BAS) OR FRASERVILLE—Clearing Channel.....	xlii
RIVER DU LOUP (EN HAUT)—Dredging.....	xliii
RIVER GATINEAU—Deepening Channel.....	xliii
RIVIÈRE MADAWASKA—Clearing Channel.....	xliii
RIVER NICOLET—Protection Works.....	xliii
RIVER OUELLE—Pier.....	xliii
RIVER RICHELIEU—Ice Piers.....	xliii
Dredging.....	xliii
RIVER STE. ANNE DE BEAUPRÉ—Improving River.....	xliv
RIVER ST. FRANCIS—Dredging.....	xliv
RIVER ST. LOUIS—Dredging.....	xliv
RIVER YAMASKA—Lock and Dam.....	xliv
SHERBROOKE—Public Building.....	xliv
SOREL do.....	xliv
STE. ANNE DE SOREL—Ice Pier.....	xlv
ST. ANNE DU SAGUENAY—Wharf.....	xlv
ST. FRANÇOIS (ILE D'ORLÉANS)—Pier.....	xlv
ST. IRÉNÉE—Block.....	xlv
ST. JÉROME—Public Building.....	xlv
ST. LAURENT—Wharf.....	xlv
ST. MICHEL—Wharf.....	xlvi
ST. REGIS—Custom House.....	xlvi
ST. VINCENT DE PAUL—Penitentiary.....	xlvi
THREE RIVERS—Custom House.....	xlvi
Post Office.....	xlvi
Harbour.....	xlvi
VAUDREUIL—Wharf.....	xlvii

	PAGE
PROVINCE OF ONTARIO :—	
AMHERSTBURG—Post Office, &c.....	xlvii
BARRIE do	xlvii
BELLEVILLE do	xlvii
Harbour.....	xlvii
BERLIN—Post Office, &c., Building.....	xlvii
BRAMPTON—Post Office Public Building.....	xlviii
BROCKVILLE do &c., Building.....	xlviii
CAYUGA—Post Office.....	xlviii
CHATHAM do &c., Building.....	xlviii
COBOURG do Custom House, &c.....	xlix
Harbour	xlix
COLLINGWOOD—Breakwater.....	xlix
CORNWALL—Post Office, &c., Building.....	xlix
GALT—Public Building.....	xlix
GANANOQUE—Post Office.....	xlix
GODERICH—Harbour.....	l
GUELPH—Post Office.....	l
HAMILTON—Drill Shed.....	l
Post Office, &c.....	l
HILTON, OR MARKSDALE—Wharf.....	l
KAMINISTIQUIA RIVER—Dredging	l
KINCARDINE—Harbour.....	li
KINGSTON—Penitentiary.....	li
Harbour	li
KINGSVILLE—Harbour.....	li
LAKE OF THE WOODS—Dam.....	li
LINDSAY—Post Office, Custom and Inland Revenue Offices	li
LITTLE CURRENT—Widening Channel.....	lii
SOUTH NATION RIVER.....	lii
LONDON—Custom House.....	lii
Infantry School.....	lii
MIDLAND—Wharfing,.....	lii
MCGREGOR'S CREEK—Protection Work.....	lii
NAPANEE—Post Office and Custom House.....	liii
OAKVILLE—Harbour.....	liii
ORANGEVILLE—Post Office.....	liii
OTTAWA—Printing Bureau.....	liii
New Departmental Building—Wellington Street.....	liii
Parliament Buildings.....	liii
East and West Blocks.....	.liii
Victoria Hall.....	liv
Public Buildings—Repairing Streets.....	liv
Parliament Grounds	liv
Major's Hill Park.....	liv
Geological Museum.....	liv

	PAGE
OTTAWA—Central Experimental Farm.....	liv
Government House.....	liv
Retaining Wall, Parliament Hill.....	liv
Ottawa City Bridges.....	liv
OWEN SOUND—Dredging.....	liv
PARRY SOUND—Clearing Channel.....	liv
PEMBROKE—Post Office, &c.....	lv
PETERBORO' do	lv
PORTAGE DU FORT—Bridge	lv
PORT ALBERT—Harbour.....	lv
PORT ARTHUR do	lv
PORT ELGIN do	lv
PORT HOPE do	lvi
PORTSMOUTH—Pier	lvi
PRESCOTT—Post Office, Custom House and Inland Revenue Offices...	lvi
RIVER AUX PÉCHES—Protection Work.....	lvi
RIVER OTTAWA—Narrows above Pembroke.....	lvi
RONDEAU—Harbour.	lvii
SAUGEEN RIVER—Pier.....	lvii
SOUTHAMPTON—Pier.....	lvii
ST. CATHARINES—Post Office.....	lvii
ST. THOMAS—Post Office, &c., Building.....	lvii
THORNBURY—Harbour.....	lvii
TORONTO—Custom House.....	lviii
Examining Warehouse.....	lviii
Post Office.....	lviii
Harbour.....	lviii
TRENTON—Post Office.....	lviii

PROVINCE OF MANITOBA :—

BRANDON—Immigrant Building.....	lviii
RED RIVER—Dredging.....	lviii
WHITE MUD RIVER—Dredging.....	lviii
STONY MOUNTAIN—Penitentiary.....	lix
WINNIPEG—Custom House.....	lix
Infantry School.....	lix
Post Office.....	lix

NORTH-WEST TERRITORIES :—

BATTLEFORD—Mounted Police Buildings.....	lix
CALGARY—Barracks.....	lix
EDMONTON—Court House.....	lx
FORT SASKATCHEWAN—Mounted Police Barracks.....	lx
LETHBRIDGE—Mounted Police Buildings.....	lx
MAPLE CREEK, &c.—Mounted Police Out-post.....	lx
MEDICINE HAT—Barracks.....	lx

	PAGE
McLEOD—Custom House.....	lx
Barracks.....	lxi
NORTH SASKATCHEWAN RIVER.....	lxi
PRINCE ALBERT—Court House and Gaol.....	lxi
North-West Mounted Police Buildings.....	lxi
QU'APPELLE—Industrial School.....	lxi
REGINA—Mounted Police Buildings.....	lxi
North-West Council Chamber.....	lxi
Indian Offices.....	lxi
Court House.....	lxi
Gaol and Lunatic Asylum.....	lxi
Post Office.....	lxi
Lieut.-Governor's Residence.....	lxi
 PROVINCE OF BRITISH COLUMBIA :—	
COWICHAN RIVER—Improving Channel.....	lxii
ESQUIMALT GRAVING DOCK.....	lxii
FRASER RIVER.....	lxii
NANAIMO—Post Office.....	lxii
Harbour.....	lxii
NEW WESTMINSTER—Penitentiary.....	lxiii
Public Building.....	lxiii
NICOMECKEL RIVER.....	lxiii
SERPENTINE RIVER.....	lxiii
SCOMAS RIVER.....	lxiii
VICTORIA—Harbour.....	lxiii
DREDGES—.....	lxiii
ENGINEERS, ENGINEMEN, FIREMEN AND CARETAKERS.....	lxiv
DOMINION BUILDINGS HEATING, &C.....	lxiv
PUBLIC BUILDINGS OTTAWA, HEATING &C.....	lxiv
SURVEYS AND EXAMINATIONS.....	lxiv
 SLIDES AND BOOMS :—	
SAGUENAY DISTRICT—.....	lxiv
ST. MAURICE do.....	lxiv
OTTAWA do.....	lxv
NEWCASTLE do.....	lxv
STAFF EMPLOYED ON SLIDES AND BOOMS.....	lxv
 ROADS :—	
TEMISCOUATA ROAD.....	lxv

	PAGE
BRIDGES: —	
BATTLE RIVER.....	lxv
; BOW RIVER.....	lxvi
TELEGRAPHS.....	lxvi
SHIP CHANNEL BETWEEN MONTREAL AND QUEBEC.....	lxvi
QUEBEC HARBOUR IMPROVEMENTS.....	lxvi
OPENING AND CLOSING OF NAVIGATION.....	lxvi
NATIONAL ART GALLERY.....	lxvi
CONTRACTS, PROPERTY PURCHASED, &c.....	lxvi
ACTS RELATING TO PUBLIC WORKS.....	lxvii
DEPARTMENTAL STAFF.....	lxvii
OFFICIAL CORRESPONDENCE.....	lxvii
YEARLY EXPENDITURES ON PUBLIC WORKS.....	lxvii
ENGINEERS AND ASSISTANTS.....	lxvii
TABLES OF DISTANCES.....	lxvii

TABLE OF APPENDICES.

	PAGE.
Appendix No. 1. Expenditure during the fiscal year. Accountant's statement.....	3
“ 2. Public Buildings throughout the Dominion. Chief Architect's Report	23
“ 3. Engineers, Enginemen, Firemen and Caretakers employed in Public Buildings throughout the Dominion.....	49
“ 4. Heating Apparatus, Gas, Water and Bell Service, Ottawa. Chief Mechanical Engineer's Report	53
“ 5. Harbours, Rivers, Dredges, Dredging, Surveys, &c. Chief Engineer's Report	57
“ 6. Ship Channel between Montreal and Quebec. Report by Montreal Harbour Commissioners ..	111
“ 7. Quebec Harbour improvements and Lévis Graving Dock. Report Quebec Harbour Commissioners	117
“ 8. Slides and Booms. Saguenay District. Superintendent's Report	121
“ 9. do St. Maurice District. Superintendent's Report	125
“ 10. do Ottawa District. Superintendent's Report.....	131
“ 11. do Newcastle District. Superintending Engineer's Report	137
“ 12. do Staff employed on the various Slides and Booms	141
“ 13. Telegraph Lines. Report of Superintendent	147
“ 14. Opening and closing of Navigation.....	169
“ 15. Contracts let by Department; property purchased or sold; property leased	173
“ 16. Acts relating to Public Works.....	183
“ 17. National Art Gallery. Report of the Curator	187
“ 18. Staff of the Department.....	191
“ 19. Official Correspondence of the Department	195
“ 20. Yearly Expenditure in each Province, by the Accountant.	199
“ 21. Engineers and their assistants employed on Public Works of Canada, by the Deputy Minister of Public Works	203

CANADA.

REPORT

OF THE

MINISTER OF PUBLIC WORKS

FOR THE

FISCAL YEAR ENDED 30TH JUNE, 1888.

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

MAY IT PLEASE YOUR EXCELLENCY :

In compliance with the requirements of Chapter 36, Section 37 of the Revised Statutes of Canada, I have the honour to submit the Annual Report of the Department of Public Works for the fiscal year ended 30th June, 1888.

The Report contains a statement of the general expenditure of the Department amounting to \$3,428,943.00 the details of which will be found in Appendix 1, pages 5 to 22, followed by Appendices giving the Annual Reports of the Chief Architect, Chief Engineer, Chief Mechanical Engineer, and other officers of the Department, as well as statements containing information pertaining to the Department.

The works under the control of this Department are:—

- PUBLIC BUILDINGS, their construction and maintenance.
- HARBOURS AND PIERS, their improvement and construction.
- WORKS ON NAVIGABLE RIVERS.
- DREDGING AND DREDGE VESSELS.
- ROADS AND BRIDGES.
- SLIDES AND BOOMS.
- TELEGRAPHS.

DESCRIPTION OF WORK DONE.

The following is a description of the work done during the fiscal year on Public Buildings, Harbours, Rivers and Dredging, arranged in alphabetical order, by Provinces.

PROVINCE OF NOVA SCOTIA.

AMHERST.

Amherst, the chief town of Cumberland County, is situated at the head of Chignecto Bay, and is 138 miles north-west of Halifax.

During the year the property on which the public building stands was fenced, storm sashes were supplied, and small necessary repairs made to the building. (Appendix 2, page 25)

ANTIGONISH.

Antigonish is the county town of the County of Antigonish, and is situated on the Halifax and Cape Breton Railway, 41 miles east of New Glasgow.

Repairs were made to the public building at this place.

 ARICHAT.

Arichat is the shire town of the County of Richmond, Cape Breton. Slight repairs were made to the public building.

 ARISAIG.

Arisaig, in the County of Antigonish, is on the south-east shore of Northumberland Strait, 15 miles east of Merigomish, the nearest harbour.

The repairs to the pier and the construction of the breakwater were completed during the fiscal year. (Appendix 5, page 60.)

 BADDECK.

Baddeck is the chief town of Victoria County, and is situated on the north side of the Great Bras d'Or Lake, about 40 miles from Sydney.

A coal shed, in connection with the Post Office, &c., building was erected, grading was done, and other improvements effected. (Appendix 2, page, 25).

 BAYFIELD.

Bayfield, in Antigonish County, is on the south coast of St. George's Bay, 8 miles east from Antigonish Harbour, and 15 miles west from the entrance to the Straits of Canso.

The work of extending the breakwater was continued during the year and is about three-fifths completed, and repairs to the wharf which is situated a quarter of a mile to the south of the breakwater were effected (Appendix 5, pages 60 and 61.)

 BAY ST. LAWRENCE.

Bay St. Lawrence, Victoria County, is at the northern extremity of Cape Breton Island, between Capes North and St. Lawrence.

The channel opened during 1886-87, and referred to in my last report as having filled up, was again opened, but with no better success, the same filling in taking place as in the previous year. (Appendix 5, page 61.)

 BIG BRAS D'OR.

Big Bras d'Or, Victoria County, is on the south side of the channel of the same name, near its entrance to the Atlantic.

During the year the construction of a wharf 160 feet in length, with a depth of 11 feet at low tide, was begun and the work is about half finished. (Appendix 5, page 61.)

 BIG POND.

Big Pond, Cape Breton County, is on the south side of East Bay, Big Bras d'Or Lake.

A wharf, 160 feet in length, with a depth of 8 feet at lowest lake level, is under construction at this place. (Appendix 5, page 61.)

 BLUE ROCK.

Blue Rock, Antigonish County, is on the south coast of St. George's Bay, 2½ miles east from Tracadie Harbour.

On 24th November, a contract was entered into for the construction of a breakwater 326½ feet long, to extend in a south-westerly direction from Blue Cape, thus protecting an area of 3½ acres, having an extreme low water depth varying from 5 to 12 feet.

At the close of the fiscal year the contractor had only completed about one-third of the work. (Appendix 5, page 61.)

 BROAD COVE.

Broad Cove Marsh, in Inverness County, is on the Gulf of St. Lawrence, 19 miles north of Mabou Harbour and 12 miles south from Margaree.

On 12th November, 1886, a contract was entered into for the construction of a wharf 400 feet long, 25 feet wide on top, and having a depth of 7 feet of water at its outer end. At the close of the fiscal year 344 feet of work had been built up to a height of 8 feet above assumed low water. (Appendix 5, page 61.)

 CHETICAMP.

Cheticamp, at the northern end of Inverness County, is situated on the south shore of the Gulf of St. Lawrence, 58 miles from Mabou.

The dredge "George McKenzie" worked from 1st August to 21st October in the channel leading into the harbour, giving a depth of 13 feet. (Appendix 5, pages 61 and 80.)

 CLIFTON (OLD BARNS.)

Clifton, Colchester County, is at the head of Cobequid Bay, and is distant from Truro about 7 miles.

A loading wharf, 237 feet long, was built during the fiscal year. (Appendix 5, page 61.)

 COMEAUVILLE.

Comeauville, Digby County, is on the south shore of St. Mary's Bay, about 3 miles south-west from Church Point.

During the year extensive repairs were made to the wharf. (Appendix 5, page 61.)

COW BAY.

Cow Bay, in the County of Cape Breton, is on the eastern coast of the island, about 18 miles south-east of Sydney.

This breakwater is 1,380 feet in length and is exposed to the full force of the Atlantic during easterly gales. It is also much weakened from the ravages of the sea worms. During the year extensive repairs were made to the structure. (Appendix 5, page 62.)

CRANBERRY HEAD.

Cranberry Head, also called Sandford, is in Yarmouth County, about 6 miles to the north-west of Yarmouth.

Some small general repairs were made to the pier at this place. (Appendix 5, page 62.)

DIGBY.

Digby, the shire town of Digby County, is situated at the western end of Annapolis Basin, and is the terminus of the Western Counties Railway.

The work undertaken during the year was the construction of a block 40 feet by 40 feet on the site of the displaced outer block, of an inclined landing between it and the undamaged inner portion of the pier, and a roadway on pile and framed bents connecting the old and new work.

The removal of the portion of the old outer block which had been washed into the dredged channel on the south side of the wharf was contracted for by Mr. W. E. Browne, but at the close of the fiscal year little progress had been made. (Appendix 5, page 62.)

EATONVILLE.

Eatonville, formerly, "Three Sisters," is in Cumberland County, about 10 miles north of Cape Chignecto.

A wharf, 120 feet in length, is under construction at this place. (Appendix 5, page 62.)

ECONOMY.

Economy, in Colchester County, is situated on the north side of the Basin of Minas.

A wharf, 216 feet in length, with 12 feet of water at ordinary tides at its outer end, the construction of which was commenced last year, was completed. (Appendix 5, page 62.)

 GREAT TANCOOK ISLAND.

Great Tancook Island, Lunenburg County, lies at the mouth of Mahone Bay, about 6 miles south of the town of Chester.

During the fiscal year the outer end and L of the pier at this place were repaired, (Appendix 5, page 62.)

 HALIFAX.

Halifax, the capital of the Province is situated on the west side of Chebucto Bay, or Halifax Harbour, a deep inlet of the Atlantic Ocean.

EXAMINING WAREHOUSE.

This building was generally repaired where necessary.

IMMIGRATION OFFICE.

Some necessary repairs were made and furniture supplied.

QUARANTINE STATION.

The woodwork of the buildings has been repaired and painted, a kitchen built, drains put in, cellars floored, and the surgeon's office fitted up and furnished. (Appendix 2, page 26.)

 INGONISH.

Ingonish is in Victoria County, on the north-east coast of the Island of Cape Breton, midway between Sydney and Cape North.

The beach protection works referred to in my report of last year were completed. (Appendix 5, page 62.)

 LISMORE.

Lismore, in Pictou County, is on Northumberland Strait, 18 miles east from Pictou Harbour.

A wharf, 200 feet in length and 20 feet in width on top, has been completed. (Appendix 5, page 62.)

 LITTLE NARROWS.

Little Narrows, Victoria County, is a contraction of the St. Patrick's Channel of the Great Bras d'Or Lake.

During the year a wharf was constructed on the south side of the Narrows. (Appendix 5, page 62.)

 LOWER HORTON.

Lower Horton, King's County, is midway between Wolfville and Avonport.

At the close of the year a commencement had been made of repairing the wharf at this place. (Appendix 5, page 63.)

 MABOU.

Mabou, in Inverness County, is situated on the Gulf of St. Lawrence, 6 miles south of Port Hood.

The brush and stone wall built to arrest the travel of sand from the westward was increased in height and extended 187 feet. Its total length is now 1,112 feet. (Appendix 5, page 63.)

 MARGARETVILLE.

Margaretville, in Annapolis County, is in the southern shore of the Bay of Fundy, about 42 miles east of Digby Gut.

During the year further heavy repairs were made to this pier. (Appendix 5, page 63.)

 METEGHAN COVE.

Meteghan Cove, Digby County, is on the southern shore of St. Mary's Bay, about 25 miles from Yarmouth and 40 from Digby.

The seaward face of the pier was close sheathed over a length of 700 feet; 575 feet of the inner face were repaired and sheathed, and other repairs to the structure executed. (Appendix 5, page 63.)

 MOIDART.

Moidart, Antigonish County, is on the Strait of Northumberland, 3 miles west from Arisaig.

A large rock has been made available as a boat landing by removing boulders from its eastern side, levelling off its top over a distance of 28 feet, and building an approach 73 feet in length. (Appendix 5, page 63.)

 McNAIR'S COVE.

McNair's Cove, Antigonish County, is situated on the west side of St. George's Bay, about 5 miles south-west of Cape George.

In April, 1887, a contract was entered into for the reconstruction of 160 feet of the breakwater. Between 1st July, 1887, and 30th June, 1888, the necessary materials had been delivered, a block 80 feet in length constructed ready for sinking, and the excavation for the foundation nearly completed. (Appendix 5, page 63.)

 NEW GLASGOW.

New Glasgow, in the County of Pictou, is situated on the East River, near its entrance into Pictou Harbour, and is 104 miles from Halifax by the Intercolonial Railway.

PUBLIC BUILDING.

The tubes of the hot water boiler were renewed, a safe supplied to the Custom House, and minor repairs effected. (Appendix 2, page 26.)

 NORTH SYDNEY.

North Sydney, in Cape Breton County, is on the North-West Arm of Sydney Harbour, 18 miles from Sydney.

PUBLIC BUILDING.

During the year the building to accommodate the Post Office, Customs and other services was completed, fitted up, furnished and occupied. (Appendix 2, page 26.)

 PARRSBORO'.

Parrsboro', in the County of Cumberland, is situated near the mouth of Partridge Island River on the north side of the Basin of Minas.

The outer end of the pier was sheathed, and the whole structure placed in repair. (Appendix 5, page 63.)

 PICTOU.

Pictou, the chief town of the County of Pictou, is situated on the harbour of the same name, which opens into the Strait of Northumberland.

CUSTOM HOUSE.

A hot water heating apparatus has been fitted up and completed.

MARINE HOSPITAL.

The building has been supplied with a hot water heating apparatus. (Appendix 2, page 26.)

HARBOUR.

The dredge "St. Lawrence" obtained a depth of 17 feet over an area of 900 square feet at the Railway Wharf, working from 14th to the 19th May. At the Market Wharf, the same dredge was engaged from 20th May to 23rd June in making a channel from the main channel in the harbour to the wharf, to a depth of 15 feet.

MIDDLE RIVER.

Between 3rd and 18th October the "St. Lawrence" made a cut 360 feet long and 22 feet deep opposite the Black Diamond Wharf. (Appendix 5, pages 63, 78 and 79.)

 PORT HOOD.

Port Hood, the shire town of the County of Inverness, is on the west coast of Cape Breton, 20 miles north of the northern entrance to the Gulf of Canso.

The outer end of the wharf was repaired and a depth of 12 feet at low water was obtained by the Dredge "St. Lawrence." (Appendix 5, pages 63, 64 and 78.)

 PORT MOUTON.

Port Mouton, Queen's County, is situated about 15 miles west of Liverpool. The top of the old mooring pier was rebuilt.

SOUTH WEST PORT MOUTON.

A breakwater 165 feet in length with a boat landing for the convenience of fishermen has been built. (Appendix 5, page 64.)

 SALMON RIVER.

Salmon River is in Digby County and about 3 miles south of Cape St. Mary.

The Harbour of Salmon River is formed by a breakwater and loading wharf on the south side of the mouth of the river. During the year 182 feet of the river face of the southern pier was rebuilt. (Appendix 5, page 64.)

 SAULNIERVILLE.

Saulnierville, Digby County, is on the southern shore of St. Mary's Bay, about 14 miles west of Weymouth.

The landing pier received some necessary repairs. (Appendix 5, page 64.)

 SHEET HARBOUR.

Sheet Harbor, in Halifax County, is situated on the Atlantic Ocean, 77 miles east of Halifax.

A contract was entered into for the construction of a ballast wharf 60 feet long by 15 feet wide with an L 18 feet long by 15 wide on top, on the West River, and the work was completed in May, 1888.

 SPENCER'S ISLAND.

Spencer's Island, Cumberland County, is at the western end of Greville Bay, in the Minas Channel, Bay of Fundy.

A public wharf, 300 feet in length, is under construction and the work is well under way. (Appendix 5, page 64.)

 SUMMERVILLE.

Summerville, Queen's County, is situated on the north side of Mouton Bay, about 12 miles west of Liverpool.

Some general necessary repairs were made to the breakwater, which is much exposed to southerly storms, and is also much damaged by the seaworm. (Appendix 5, page 64.)

 TROUT COVE (OR CENTREVILLE.)

Trout Cove or Centreville, Digby County, is on the south shore of the Bay of Fundy nearly midway between Digby Gut and Petite Passage.

During the year 140 feet of the inner portion of the seaward face was rebuilt from the beach to the top of the "break" and other repairs executed. (Appendix 5, page 64.)

 WALLACE.

Wallace is in Cumberland County, 16 miles from Wentworth.

The dredge "Cape Breton" was employed in improving the channel for the ferry and in removing obstructions off the "Union Freestone" and "Wallace Greystone" Companies' wharves. (Appendix 5, pages 64 and 79.)

 WESTERN HEAD.

Western Head, Queen's County, is situated on the southern entrance to Liverpool Bay, about 4 miles from Liverpool.

During the year the construction of a stone breakwater was commenced and was not completed at the close of the year. (Appendix 5, page 65.)

 WILLOW COVE.

Willow Cove, Queen's County, is at the head of Port Mouton Harbour.

A breakwater, 140 feet in length, was built during the year for the protection of fishing boats. (Appendix 5, page 65.)

 WINDSOR.

Windsor, the shire town of Hants County, is situated on an arm of the Basin of Minas, 45 miles north-west of Halifax.

POST OFFICE BUILDING.

The drains were repaired, cleaned and put in order, storm sashes were supplied to all the windows on the ground and first floors; additions were made to the heating apparatus. Additional office fittings were supplied and sundry general repairs made. (Appendix 2, page 26.)

 YARMOUTH.

Yarmouth, the shire town of Yarmouth County, is situated on a small bay setting up from the Atlantic, 235 miles south-east of Halifax, and is the terminus of the Western Counties Railway.

PUBLIC BUILDING.

The various offices were supplied with fittings, furniture and carpets, and asphalt sidewalks were laid on the streets fronting the building. (Appendix 2, page 27.)

HARBOUR.

The dredge "Canada" was engaged during the whole of the year in improving the channel in the harbour. (Appendix 5, pages 65 and 79.)

 PROVINCE OF PRINCE EDWARD ISLAND.

 BELFAST.

Belfast Pier, or as it is locally called "Halliday's," is in Queen's County, and on the south side of Orwell Bay.

The western end of the pier was repaired to admit of the regular landing of passengers and freight. (Appendix 5, page 59.)

 CASCUMPEE.

Cascumpee, in Prince County, is on the north side of Foxley River, an arm of Cascumpee Bay, and is about 20 miles south of North Cape.

The formation of a channel through the rocky bar obstructing the entrance to the harbour, which was commenced in 1885, was continued during the year. (Appendix 5, page 59.)

 CHARLOTTETOWN.

Charlottetown, the Capital of the Province, is situated on a neck of land between the North and Hillsboro' Rivers, in Queen's County.

DOMINION BUILDING.

The windows were repaired, furniture made good, and the grounds graded. (Appendix 2, page 25.)

 HICKEY'S PIER.

Hickey's Pier is in Queen's County, and on the south-eastern side of the Hillsboro' River, about 10 miles north-west from Charlottetown.

Necessary renewals were made to parts of the pier, a new landing slip was built, the approach partly rebuilt and filled in. (Appendix 5, page 59.)

MALPEQUE.

Malpeque is in Prince County, on the eastern side of the entrance to Richmond Bay.

Some repairs were made to the pier at this place.

MONTAGUE.

Montague is in King's County, and is about 26 miles east of Charlottetown.

POST OFFICE.

The fencing has been completed, but only a portion of the grading and foot-paths, owing to the failure on the part of the contractor to carry out this portion of the work. (Appendix 2, page 25.)

MURRAY HARBOUR.

South Murray Harbour Pier, King's County, is at the head of navigation on the South River.

This pier was generally repaired and the approach made good. (Appendix 5, page 59.)

NINE-MILE CREEK.

Nine-Mile Creek, in Queen's County, is about 5 miles west of the Block House Light, at the entrance to Charlottetown Harbour.

The pier at this place received general necessary repairs. (Appendix 5, page 60.)

NEW LONDON.

New London, or Greville Bay, is in Queen's County, about 10 miles south-east of the entrance into Richmond Bay.

The works in this harbour were repaired where necessary. (Appendix 5, page 59.)

NORTH CARDIGAN.

North Cardigan Pier is on the north shore of Cardigan River, near its entrance into Cardigan Bay.

The roadway was repaired to render it available for traffic. (Appendix 5, page 60.)

PINETTE.

This pier is on the south side of the main Pinette River, near the junction of the North and South Branches.

The structure was placed in proper order. (Appendix 5, page 60.)

 SOURIS.

Souris is on Colville Bay, King's County, 16 miles to the eastward of East Point, and is the eastern terminus of the Prince Edward Island Railway.

The inner end of the breakwater for a distance of 800 feet was raised where necessary and fully ballasted, and other improvements effected. (Appendix 5, page 60.)

 TIGNISH.

Tignish, Prince County, is at the mouth of the Big Tignish River, and about 8 miles east of North Point.

The Dredge "Prince Edward" was engaged until 27th August, in deepening the channel at this place. (Appendix 5, pages 60 and 80.)

 VERNON RIVER.

Vernon River Pier is at the head of navigation on the river, and is about two miles above its entrance into Orwell Bay.

The pier was repaired and much improved. (Appendix 5, page 60.)

 VICTORIA PIER.

Victoria Pier, Crapaud, is at the head of navigation inward from Crapaud Basin.

One of the spans of this pier was repaired. (Appendix 5, page 60.)

 PROVINCE OF NEW BRUNSWICK.

 ANDERSON'S HOLLOW.

Anderson's Hollow, in Albert County, is on the eastern side of Salisbury Bay, which lies between Cape Enragé and Matthew's Head.

A contract has been entered into for the construction of a length of 260 feet of cribwork, to connect the isolated breakwater with the shore, and at the close of the year the work was well under way. (Appendix 5, page 65.)

 BAIE VERTE.

Baie Verte is on the eastern coast of New Brunswick, at the boundary between that Province and Nova Scotia.

A ballast wharf, 100 feet long by 40 feet wide, was constructed at a point near the head of the bay. The work was done by contract. (Appendix 5, page 65.)

 BATHURST.

Bathurst, the shire town of Gloucester County, is on Bathurst Bay, which opens into the Baie des Chaleurs, and is about 175 miles from St. John.

POST OFFICE, &C., BUILDING.

The building has been fitted up, furnished and occupied; the property fenced on two sides; sidewalks put down on the streets fronting the building, and the yard, &c., graded. (Appendix 2, page 27.)

 BELLIVEAU VILLAGE.

Belliveau, in Westmorland County, is on the eastern shore of the Petitcodiac River, about 18 miles below Moncton.

A contract has been entered into for the construction of a public wharf, 233 feet in length, and at the close of the fiscal year about one-third had been built. (Appendix 5, page 6 .)

 CARLETON.

Carleton is situated in the County of St. John, on the western side of St. John Harbour, and in the Electoral Division of the City of St. John.

POST OFFICE.

The roof, eave troughs and down-pipes were repaired, and a contract entered into for supplying the building with electric light. (Appendix 2, page 27.)

 CAPE TORMENTINE.

Cape Tormentine, in Westmorland County, is situated on the Strait of Northumberland, and is the point from which the crossing to Prince Edward Island is generally made during the winter.

Owing to the failure of the contractors to prosecute their work, fresh tenders were called for and a second contract has been entered into for the completion of the wharf. (Appendix 5, page 65.)

 CHATHAM.

Chatham, in the County of Northumberland, is situated on the Miramichi River, about 12 miles above its mouth.

POST OFFICE, &C., BUILDING.

The front and sides of the roof of the wing were re-slatted and the roof repaired generally.

 QUARANTINE.

The Caretaker's house was repaired; chimneys, porches, &c., built for the hospitals, various general repairs made. One of the hospitals raised, and pathways made between the buildings and hospitals. (Appendix 2, page 27.)

 CLIFTON.

Clifton, Gloucester County, is situated on the south shore of the Baie des Chaleurs, about 19 miles eastward of the entrance to Bathurst Harbour.

The breakwater at this place received general necessary repairs. (Appendix 5, page 65.)

 COCAGNE.

Cocagne, in Kent County, is on the south-west coast of the Strait of Northumberland, about 10 miles west of Shediac.

The wharf built in 1841-52 was levelled up and widened over a length of 110 feet. (Appendix 5, page 66.)

 DALHOUSIE.

Dalhousie, the chief town in Restigouche County, is situated on the south shore of the Restigouche River, at its entrance into the Baie des Chaleurs.

POST OFFICE, &C., BUILDING.

A contract has been awarded for the construction of a building of stone, with wooden roof, doors and partitions and metal roof covering. The main building is to be of two and one-half stories, 38 feet by 29 feet. The ground floor for the Post Office, the first floor for the Customs, the attic for the caretaker and the basement for the furnace, fuel, &c. In the rear an Examining Warehouse, 28 feet by 15 feet, of one story, is to be built. (Appendix 2, page 27.)

HARBOUR.

The ballast wharf, 300 feet in length, referred to in my report of last year, was completed. (Appendix 5, page 66.)

 DORCHESTER.

Dorchester, the chief town of Westmorland County, is situated on the left bank of the Petitcodiac River, near its entrance into Shepody Bay.

PENITENTIARY.

A number of ordinary cell doors were made, some of which were hung. Machines were renewed and repaired. Tank houses were repaired and painted, and general repairs made to other portions of the building. (Appendix 2, page 28.)

 FREDERICTON.

Fredericton, the Capital of the Province of New Brunswick, is situated in the County of York, on the River St. John, about 60 miles from the City of St. John.

PUBLIC BUILDING.

Asphalt sidewalks were laid; the Post Office and Custom House supplied with gas fittings; the Weights and Measures Office was fitted up. A flag pole erected and some general repairs made. (Appendix 2, page 28.)

 GRAND ANSE.

Grand Anse, in Gloucester County, is a small indent on the southern shore of the Baie des Chaleurs, about midway between Bathurst and Shippegan.

Materials have been procured for continuing the work of re-building the top of the breakwater carried away in January, 1885. (Appendix 5, page 66.)

 KINGSTON.

Kingston, in Kent County, is on the Richibucto River, 3 miles from its mouth, and 36 miles from Shediac.

MARINE HOSPITAL.

Further renewals and repairs in addition to those referred to in my report of last year were effected to the Hospital Building. (Appendix 2, page 28.)

 PARTRIDGE ISLAND.

Partridge Island, lies directly off the entrance to the Harbour of St. John.

Many years ago two small piers were built to facilitate the landing of supplies for the lighthouse and other buildings of the Marine Department.

The eastern of these piers was almost destroyed during a storm in February, 1887. The wreckage, which was swept into the harbour, was removed, and at the close of the fiscal year the work of rebuilding the eastern pier was nearly completed. (Appendix 5, page 66.)

 MONCTON.

Moncton, Westmorland County, is situated at the head of navigation of the Petitcodiac River, and is 80 miles from St. John by Intercolonial Railway.

POST OFFICE.

The public lobby, porch and doors were altered and some repairs executed. (Appendix 2, page 28.)

 NEWCASTLE.

Newcastle, the shire town of Northumberland County, is situated on the left bank of the Miramichi River, about 18 miles from its entrance into Miramichi Bay.

PUBLIC BUILDING.

A tube well to provide water for the building was put in. Asphalt sidewalks laid. The yard was paved with cedar blocks. Storm sashes were provided for the windows, and sundry repairs and painting executed. (Appendix 2, page 28.)

 PORTLAND.

Portland is situated in the County of St. John and adjoins the City of St. John.

POST OFFICE.

The building received some general repairs. (Appendix 2, page 28.)

 RICHIBUCTO.

Richibucto is situated on the south west shore of the northern entrance into the Strait of Northumberland, and about 40 miles north of Shediac Harbour.

The breakwater was repaired and 200 feet of brush pile and stone dam was constructed upon the beach.

The Dredge "St. Lawrence" was engaged between the 13th of July and the 7th of September in deepening and otherwise improving the North Channel, one of the outer entrances to the harbour. (Appendix 5, pages 66 and 73.)

 RIVER MADAWASKA.

The Madawaska is a tributary of, and empties into the River St. John, at Edmundston.

The tow path was improved and obstructions removed from the river. (Appendix 5, page 66.)

 RIVER ST. JOHN.

The St. John River rises in the highlands which separate Maine from Canada, and for part of its course forms the boundary between Canada and the United States.

Between St. John and Fredericton 78 snags were moved from different parts of the river. From 1st to 18th July, and from 20th September to 15th October, the dredge "New Dominion" was engaged in opening a channel to the public wharf at the head of Belleisle Bay, King's County, at which latter date the work was completed. At Grand Lake, Queen's County, the same dredge was employed in improving the channel through the flats, working from the 18th July to the 10th September. Between Spring Hill and Bear Island, sand bars and boulders were removed. Sand bars and boulders which obstructed the channel, were removed

between Bear Island and Meductic Falls. At Meductic Falls blasting operations were carried on, and sand bars and boulders were removed from the channel between the Falls and Eel River, and the tow path was repaired. The tow path was repaired, and obstructions were removed between Eel River and River des Chutes. Between Aroostook and Salmon River repairs were made to the tow path. Tow path repaired and obstructions removed between Salmon River and Grand Falls. At Grand Falls obstructions were removed, and the shear dam on the east side of the river was repaired. From the Grand Falls to the River St. Francis repairs were made to bridges on the tow path, and the channel was cleared of boulders and sand bars. At Edmundston the breakwater was planked. On the River Tobique, below the forks, the tow path was repaired, and ledges, boulders and other obstructions were removed from the channel. (Appendix 5, pages 66, 67 and 79.)

ST. JOHN.

St. John, the commercial metropolis of the Province, is situated at the mouth of the St. John River, and is, as is well known, an important seaport.

CUSTOM HOUSE.

The roof covering was renewed on part of the building.

The outside iron work was re-painted. Certain of the offices, with the halls and corridors were cleaned, kalsomined and painted, and the woodwork grained and varnished. An alteration was made in the basement to allow carts to deposit the coal directly in the coal vaults.

MARINE HOSPITAL.

The roof was temporarily repaired and the heating apparatus extended.

POST OFFICE.

An office for matter in bond was fitted up. Iron gratings were placed over basement windows and an iron hand rail outside the building.

SAVINGS BANK.

General repairs were made to this building. (Appendix 2, pages 28 and 29.)

HARBOUR.

A contract was entered into for reconstructing that portion of the protection work at the inner end of the Breakwater at Negro Point and around the foot of the cliff on which stands Fort Dufferin, which had been much damaged, and for strengthening and repairing other parts of the work, and at the close of the year the work was about half completed. (Appendix 5, page 67.)

ST. STEPHEN.

St. Stephen, in Charlotte County, is situated at the head of navigation of the Ste. Croix River, which forms part of the boundary between New Brunswick and the United States.

PUBLIC BUILDING.

A safe, furniture and carpets for the Post Office were supplied, and the plumbing and gas fixtures put in. (Appendix 2, page 29.)

UPPER SALMON RIVER.

Upper Salmon River, Albert County, empties into Salisbury Bay, about 4 miles north-east of Mathews Head.

The further length of the breakwater referred to in my report of last year was completed, and the inner end of that portion built in 1883, was secured by close sheathing and deposits of brush and stone on either side. (Appendix 5, page 67.)

WILSON'S BEACH, CAMPOBELLO.

Wilson's Beach is on the western side of Campobello Island, near its northern end.

The breakwater was raised, close sheathed and repaired generally. (Appendix 5, page 67.)

WOODSTOCK.

Woodstock is the shire town of the County of Carleton, and is situated on the left bank of the St. John River, 63 miles from Fredericton by New Brunswick Railway.

POST OFFICE, CUSTOM HOUSE, &c.

During the year some carpets were supplied and minor repairs executed. (Appendix 2, page 29.)

PROVINCE OF QUEBEC.

AYLMER.

Aylmer is the *chef-lieu* of the County of Ottawa, and is situated on the Ottawa River about 9 miles above the City of Ottawa.

POST OFFICE.

A contract has been entered into for the construction of a building of 2½ stories, 39 by 29 feet, of brick walls with stone dressings and foundations, with a wooden annex in the rear, 24 by 20 feet. (Appendix 5, page 29.)

 BAGOTVILLE.

Bagotville—or St. Alphonse de Bagotville,—is at the head of Ha! Ha! Bay! River Saguenay.

The flooring of the wharf was repaired where required. (Appendix 5, page 71.)

 BERTHIER (*EN HAUT*).

Berthier (*en haut*), in the county of the same name, is on the north shore of the St. Lawrence, 45 miles north-east of Montreal.

The ice pier built in 1886 was raised 3 feet. (Appendix 5, page 67.)

 CAP DE LA MAGDELEINE.

Cap de la Magdeleine is in the County of Champlain, about 2 miles below Three Rivers, on the north shore of the St. Lawrence.

A pier 52½ by 23 feet on top, with an approach 200 feet long having 8 feet of water at its head, was built at this place. (Appendix 5, page 67.)

 CARLETON.

Carleton, Bonaventure County, is on the south shore of the Baie des Chaleurs 36 miles from Campbellton and 5 from Dalhousie, N. B.

A waiting room and freight shed was built on the wharf. (Appendix 5, page 67.)

 CHICOUTIMI.

Chicoutimi, in the county of the same name, is situated on the south side of the Saguenay River, at the head of navigation, and 71½ miles from Tadoussac.

 MARINE HOSPITAL.

The interior of the covered way was finished and sundry repairs to the building made. (Appendix 2, page 29.)

 COATICOOK.

Coaticook, in the County of Stanstead, is on the Coaticook River, 122 miles south-east of Montreal.

 PUBLIC BUILDING.

As mentioned in my report of last year a site was purchased for the erection of a public building at this place.

During the past year a contract has been entered into for the construction of a building to accommodate the Post Office, Customs and Inland Revenue Offices. It

will be $2\frac{1}{2}$ stories, 41 by 56 feet, and a one story annex, 42 feet 6 inches by 20 feet. The walls are to be of brick with stone dressings and on stone foundations. (Appendix 2, page 30.)

COTEAU DU LAC.

Coteau du Lac, or St. Jacques de Soulanges, is on the north shore of the River St. Lawrence, 24 miles above Montreal.

A wharf 100 feet long, 20 feet wide, with 6 feet of water at its outer side, with an approach, 110 feet in length, is under construction at this place, and was about half completed at the close of the fiscal year. (Appendix 5, page 68.)

ETANG DU NORD.

Etang du Nord is at the western end of Grindstone Island, one of the Magdalen Group, in the Gulf of St. Lawrence.

The breakwater under construction at this place for some time is now completed. It is 500 feet in length, with a width on top of 32 feet. (Appendix 5, page 68.)

FLINT'S WHARF.

Flint's Wharf is at the head of Lake Megantic.

This wharf which was damaged by the ice on the *débacle* in the spring was repaired.

GROSSE ISLE

An island in the St. Lawrence River, about 33 miles below Quebec, in the County of Montmagny.

QUARANTINE STATION.

General repairs were made to the building, and the plastering of the brick hospital destroyed by frost was renewed. (Appendix 2, page 30.)

HULL.

The City of Hull is in the County of Ottawa, on the north shore of the Ottawa River, and connected with the City of Ottawa by the Union Bridge.

POST OFFICE.

The building was completed, fitted up, furnished and provided with a hot water heating apparatus. (Appendix 2, page 30.)

ILE AUX COUDRES.

Ile aux Coudres is in the County of Charlevoix, 12 miles from Bay St. Paul.

The face timbers and fenders of the wharf were renewed where required. (Appendix 5, page 68.)

 ISLE PERROT.

Isle Perrot, in the County of Vaudreuil, is in the St. Lawrence River, between the Lake of the Two Mountains and Lake St. Louis.

The wharf referred to in my report of last year as under construction, has been completed. It consists of a block, 130 feet long, 30 feet wide, having a depth of 8 feet of water, and is distant from the shore, 580 feet. (Appendix 5, page 68.)

 ILE VERTE.

Ile Verte is the *chef-lieu* of the County of Temiscouata.

A block 50 by 40 feet, and 20 feet high, is in course of construction at this place. (Appendix 5, page 68.)

 JOLIETTE.

Joliette is in the county of the same name, and is situated on the River Assomption.

 POST OFFICE, &C., BUILDING.

A site having been purchased, a contract has been entered into for the construction of a 2½ story main building, 34 by 50 feet, of brick, with stone dressings and foundations and a one story brick annex, 17 by 31 feet, and the work is under way. (Appendix 2, page 30.)

 KAMOURASKA.

Kamouraska, in the county of the same name, is on the south shore of the St. Lawrence, 90 miles below Quebec.

Some necessary repairs were made to the wharf to prevent damage by ice.

 LAPRAIRIE.

Laprairie, the *chef-lieu* of the county of the same name, is on the south shore of the St. Lawrence, 7 miles above Montreal.

To prevent the disastrous floods of past years, an earth embankment, 1,600 feet in length, was constructed, and has proved most beneficial. A cribwork retaining wall was also built for a length of 480 feet. A new channel was opened from the main channel in the St. Lawrence to the public wharf, by one of the Departmental dredges. (Appendix 5, pages 68 and 81.)

 LES ÉBOULEMENTS.

Les Eboulements, in the County of Charlevoix, is on the north shore of the St. Lawrence, about 69 miles below Quebec.

Small repairs were made to the pier at this place. (Appendix 5, page 68.)

 L'ISLET.

L'Islet is on the south shore of the St. Lawrence, 63 miles below Quebec. The roadway and slip of this pier were repaired. (Appendix 5, page 68.)

 LONGUEUIL.

Longueuil, the *chef-lieu* of the County of Chambly, is situated on the south shore of the St. Lawrence, 3 miles from Montreal.

The contract for the construction of the wharf at this place, referred to in my report of last year, was completed during the year. (Appendix 5, page 69.)

 MARIA INDIAN RESERVE.

The Roman Catholic Chapel received necessary repairs. (Appendix 2, page 30.)

 MONTREAL

Montreal, the largest city in Canada, is situated at the head of ocean navigation of the St. Lawrence, and is the principal port of imports and exports in the Dominion.

ARMORIES.

The armories are being fitted up and the offices furnished.

CUSTOM HOUSE.

Extensive changes have been made in the fittings of the long room, and an unfurnished room was fitted up for the records.

EXAMINING WAREHOUSE.

The roof has been repaired.

POST OFFICE.

Various necessary changes, additions and repairs were made to this building. (Appendix 2, page 31.)

 MURRAY BAY

Murray Bay is in the County of Charlevoix, on the north shore of the St. Lawrence, 84 miles below Quebec.

Some small repairs were made to the wharf. (Appendix 5, page 69.)

 NEW CARLISLE.

New Carlisle, the *chef-lieu* of Bonaventure County, is on the north shore of the Baie des Chaleurs, 65 miles below Campbellton, N. B.

The wharf received necessary repair. (Appendix 5, page 69.)

 NEWPORT RIVER.

This river empties into the Baie des Chaleurs, 25 miles to the westward of Percé.

Materials for an addition to the protection works have been procured. (Appendix 5, page 69.)

 PAPINEAUVILLE.

Papineauville is on the River Ottawa, 41 miles below the City of Ottawa.

From the 23rd of May and up to the close of the fiscal year a Departmental dredge was engaged in opening a channel from the Ottawa into Papineauville Bay, and good progress had been made. (Appendix 5, pages 69 and 81.)

 PERCÉ.

Percé, in the County of Gaspé, is situated on the north shore of, and at the entrance to the Baie des Chaleurs.

A contract has been entered into for the construction of a wharf, and at the close of the year the work was in hand. (Appendix 5, page 69.)

 PIOPOLIS (WHARF).

Piopolis Wharf is at the south-western end of Lake Megantic.

Small repairs were made to this wharf.

 PORT DANIEL.

Port Daniel, in the County of Bonaventure, is on the north shore of the Baie des Chaleurs, about 75 miles below Campbellton, N. B.

A contract has been entered into for the construction of a wharf 350 feet long and of varying widths, with a block 50 feet square at the outer end, and at the close of the year the work was nearly completed. (Appendix 5, page 69.)

 QUEBEC.

Quebec, the Capital of the Province of the same name, is situated on the north shore of the St. Lawrence River, at its confluence with the River St. Charles, 160 miles below Montreal.

 CITADEL.

The usual and ordinary repairs, alterations, &c., of His Excellency's quarters were carried out.

 CITADEL CLIFF.

A further quantity of shale liable to endanger life and property was removed.

CUSTOM HOUSE.

Extensive repairs were effected in the basement floor. The plumbing was in a great part renewed and a new well put in.

DRILL HALL.

The building has been completed.

IMMIGRANT BUILDING.

This building which was described in my report of last year was completed and handed over to the Department of Agriculture.

OBSERVATORY.

The roof and residence were repaired.

POST OFFICE.

General repairs were made to the building where required.

QUEEN'S WHARF BUILDING.

General repairs were effected. (Appendix 2, pages 31, 32.)

RIVER CABANO.

This river flows into Lake Témiscouata.

The river was cleared of boulders and timber over a length of 15 miles. (Appendix 5, page 69.)

RIVER CHATEAUGUAY.

This river enters into the St. Lawrence on its southern shore, some miles above Caughnawaga.

Two of the Departmental dredges operated in the upper arm of the river, to obtain a channel 8 feet deep. (Appendix 5, pages 69, 70, 81 and 82.)

RIVER DU LIEVRE.

The River du Lièvre, in the County of Ottawa, empties into the Ottawa River on its north shore, about 18 miles below the City of Ottawa.

The construction of a lock and dam at the Little Rapids, referred to in my report of last year, was prosecuted by the contractors, and at the close of the year the work was well in hand. (Appendix 5, page 70.)

RIVER DU LOUP (EN BAS) OR FRASERVILLE.

River du Loup, or Fraserville, County of Témiscouata, is situated on the south side of the St. Lawrence, about 114 miles below Quebec.

The inside channel was cleared of a quantity of sand, gravel and boulders. (Appendix 5, page 70.)

 RIVER DU LOUP (EN HAUT.)

This river flows through the County of Maskinongé and empties into the St. Lawrence in Lake St. Peter, 20 miles above Three Rivers.

Dredging through the shoal at the mouth of the river, referred to in my report of last year, was continued. (Appendix 5, page 70.)

 RIVER GATINEAU.

The Gatineau enters into the Ottawa on its northern side, below the City of Ottawa.

The Departmental dredge "Nipissing" was engaged during September and October in dredging a channel below the Canadian Pacific Railway Bridge and through a shoal off the ferry wharf at Gatineau Point. (Appendix 5, pages 70 and 81.)

 RIVIÈRE MADAWASKA.

This river has its source in Lake Témiscouata, and after a course of 30 miles falls into the St. John at Edmundston, N. B.

Rocks and boulders obstructing the navigation were removed from about a mile of the river. (Appendix 5, page 70.)

 RIVER NICOLET.

The River Nicolet, in the county of the same name, flows into the St. Lawrence on its southern shore, at the foot of Lake St. Peter.

A further length of 630 feet of pile protection has been driven. (Appendix 5, page 69.)

 RIVER OUELLE.

The River Ouelle flows through the County of Kamouraska and empties into the St. Lawrence on its southern shore, 75 miles below Quebec.

The pier was repaired. (Appendix 5, page 70.)

 RIVER RICHELIEU.

The Richelieu flows into the St. Lawrence on its southern shore, at the head of Lake St. Peter, 45 miles above Montreal.

Two ice piers were constructed during the year to afford protection to the Town of Sorel during the run of ice in the spring.

The Departmental Dredges "Nipissing" and "Queen" were engaged in straightening and deepening the crooked channel between the island and the western shore at St. Antoine. (Appendix 5, pages 70, 80 and 82.)

RIVER STE. ANNE DE BEAUPRÉ.

This river flows through the County of Montmorency, and empties into the St. Lawrence on its north shore, about 22 miles below Quebec.

The improvements undertaken to facilitate the descent of timber on this river have been completed. (Appendix 5, page 71.)

RIVER ST. FRANCIS.

The River St. Francis rises in the County of Wolfe, and after a course of about 100 miles, empties into Lake St. Peter, on its southern shore.

Dredging through the shoal at the mouth of the river, through a shoal two miles above Tourville Mills, and through another at the Great Bend, was continued during the year. (Appendix 5, page 71.)

RIVER ST. LOUIS.

The River St. Louis flows eastwardly through the County of Beauharnois, and empties into the St. Lawrence at the Town of Beauharnois.

The deepening of the "Feeder" by the dredge "St. Louis" was completed on the 16th October. (Appendix 5, pages 71 and 82.)

RIVER YAMASKA.

The River Yamaska is in the county of the same name, and empties into the St. Lawrence on its southern shore, at the head of Lake St. Peter.

Various necessary works of repair and renewal were effected to the lock and dam at Ile à Cardin. (Appendix 5, page 71.)

SHERBROOKE.

Sherbrooke, the chief town of the county of the same name, is situated on the Magog River, 101 miles east of Montreal, by the Grand Trunk Railway.

PUBLIC BUILDING.

The roof was repaired and other work executed. (Appendix 2, page 33.)

SOREL.

Sorel, the *chef-lieu* of the County of Richelieu, is situated on the right bank of the Richelieu River, at its confluence with the St. Lawrence, 45 miles below Montreal.

PUBLIC BUILDING.

A clock has been placed in the tower. (Appendix 5, page 33.)

 STE. ANNE DE SOREL.

Ste. Anne de Sorel is in the County of Richelieu, about 3 miles below Sorel, on the south shore of the St. Lawrence.

An additional ice pier was built during the year, and pier No. 3 was raised. (Appendix 5, page 71.)

 STE. ANNE DU SAGUENAY.

Ste. Anne du Saguenay is in the County of Chicoutimi, on the River Saguenay opposite Chicoutimi.

Timber has been procured for the construction of the wharf at this place. (Appendix 5, page 71.)

 ST. FRANÇOIS (ILE D'ORLÉANS.)

St. François is situated at the extreme eastern end of the Island of Orleans, about 21 miles below Quebec, in the County of Montmorency. •

A landing slip was constructed and other works of improvement carried out. (Appendix 5, page 71.)

 St. IRÉNÉE.

St. Irénée, in the County of Charlevoix, is on the north shore of the St. Lawrence, 78 miles below Quebec.

The block was raised 19 feet. (Appendix 5, page 72.)

 ST. JÉRÔME.

St. Jérôme, the *chef-lieu* of the County of Terrebonne, is situated on the North River, 22 miles north of Montreal.

PUBLIC BUILDING.

A contract has been entered into for the construction of a building of brick, with stone dressings and foundations. The main portion to be 30 by 56 feet, of two storys, basement and attic, with a two story porch in front, 18 by 8 feet, and a one story annex in the rear, 33 by 21 feet, to be occupied by the Post Office, Custom House, Examining Warehouse and Weights and Measures. (Appendix 2, page 32.)

 ST. LAURENT.

St. Laurent, on the Island of Orleans, County of Montmorency, is 14 miles north-east of Quebec.

The roadway of the wharf was repaired, the slip completed, and repairs made to the face timbers and superstructure. (Appendix 5, page 72.)

 ST. MICHEL.

St. Michel, in the County of Bellechasse, is on the south shore of the St. Lawrence, 16 miles below Quebec.

Extensive repairs were made to the wharf. (Appendix 5, page 72.)

 ST. REGIS.

St. Regis is on the St. Lawrence, 6 miles from Cornwall.

CUSTOM HOUSE.

Winter sashes were provided and the woodwork and chimney tops repaired. (Appendix 2, page 33.)

 ST. VINCENT DE PAUL.

St. Vincent de Paul is situated on the River des Prairies, in the County of Laval, 13 miles from Montreal.

PENITENTIARY.

A boiler and engine room of cut stone was erected and completed. The warden's and deputy warden's residences were renovated and furnished with hot water heating apparatus. The steam heating apparatus for the dormitories and keeper's hall was completed. An ice house and lumber shed were built. The superstructure of the bridge to the quarry was renewed. The keeper's hall was altered and repaired. A large oven was built for the bakery and other general works of improvement and repair effected throughout the buildings. (Appendix 2, pages 32, 33.)

 THREE RIVERS.

The City of Three Rivers, which forms the Electoral District of the same name, is situated at the head of tide water in the St. Lawrence, 72 miles above Quebec.

CUSTOM HOUSE.

The building was supplied with a hot water heating apparatus. Some fittings were supplied to the Excise Offices and general repairs effected.

POST OFFICE.

The drainage has been altered and extended, and a new hot water furnace with additional piping and radiators put in. (Appendix 2, pages 33, 34.)

HARBOUR.

An ice pier, 30 by 26 feet at the base and 17 feet 2 inches in height, was built on the fore shore of the St. Lawrence, at a point 1,600 feet above Deane's wharf. (Appendix 5, page 72.)

 VAUDREUIL.

Vaudreuil, in the county of the same name, is situated on the Ottawa River, about 25 miles above Montreal.

During the year a wharf 324 feet long, 20 feet wide, the outer block being 30 by 20 feet, was constructed at this place. (Appendix 5, page 72.)

 PROVINCE OF ONTARIO.

 AMHERSTBURG.

Amherstburg, in the Electoral District of South Essex, is situated on the Detroit River, near its junction with Lake Erie.

 POST OFFICE, &c.

The heating apparatus was altered and some repairs made to the building. (Appendix 2, page 34.)

 BARRIE.

Barrie, in the Electoral District of North Simcoe, is situated on Kempenfeldt Bay, an arm of Lake Simcoe, 60 miles north of Toronto.

 POST OFFICE, &c.

A stone enclosure wall was built; block pavement sidewalks were laid on the streets fronting the building, and some fittings and furniture supplied. (Appendix 2, page 34.)

 BELLEVILLE.

Belleville, in the Electoral District of West Hastings, is situated at the mouth of the River Moira, which empties into the Bay of Quinté, 43 miles west of Kingston.

 POST OFFICE.

Ordinary repairs were effected to the plumbing, &c. (Appendix 2, page 34.)

 HARBOUR.

The dredging of the channel to form an outlet for the river during freshets, was continued during the year, but owing to the shallowness of the water and the hard nature of the material to be removed, the progress was not as rapid as it otherwise would have been. (Appendix 5, page 72.)

 BERLIN.

Berlin, in the Electoral District of North Waterloo, is situated on the Grand River, and is 62 miles from Toronto by Grand Trunk Railway.

POST OFFICE, &C., BUILDING.

A new drain was put in; Caretaker's apartments were cleaned and some repairs effected. (Appendix 2, page 34.)

BRAMPTON.

Brampton, the chief town of the County of Peel, is situated on the Etobicoke River, 21 miles north-west of Toronto.

POST OFFICE PUBLIC BUILDING.

A lot has been obtained whereon to erect a public building; the plans &c., of which are being prepared. (Appendix 2, page 34.)

BROCKVILLE.

Brockville, the chief town of the United Counties of Leeds and Grenville, is situated at the foot of the Lake of a Thousand Islands, on the north shore of the St. Lawrence, 125 miles from Montreal.

POST OFFICE &C., BUILDING.

A granolithic sidewalk has been laid in front of the building and ventilators put in the windows. (Appendix 2, page 34.)

CAYUGA.

Cayuga, the chief town of the County of Haldimand, is situated on the Grand River, 25 miles south of Hamilton.

POST OFFICE.

A contract has been entered into for the erection of a Post Office building. It will consist of a 2 story main building with basement and attic, 39½ feet by 25 feet, with a one story annex, 25 by 23 feet, exclusive of the vault. The walls are to be of brick with stone dressings and stone foundations. (Appendix 2, pages 34 and 35.)

CHATHAM.

Chatham, the chief town of the County of Kent, is situated on the River Thames, and is 67 miles south-west of London by the Grand Trunk Railway.

POST OFFICE, &C., BUILDING.

Ordinary repairs only were effected. (Appendix 2, page 35.)

COBOURG.

Cobourg, in the Electoral District of West Northumberland, is situated on the north shore of Lake Ontario, 96 miles west of Kingston.

POST OFFICE, CUSTOM HOUSE, &c.

Various alterations were made to the building and fittings. (Appendix 2, page 35.)

HARBOUR.

In March last a contract was entered into for rebuilding a portion of the western pier; the work is well in hand. The inner harbour was deepened to 13 feet by one of the Departmental dredges. (Appendix 5, pages 72 and 81.)

COLLINGWOOD.

Collingwood, in the Electoral District of North Simcoe, is situated on the south shore of Georgian Bay, 94 miles from Toronto by railway.

During the fiscal year a contract was entered into for the construction of work to close the opening between the old slab wharf (so-called) and the western end of the outer breakwater, and at the close of the year the work was nearly completed.

CORNWALL.

Cornwall, the chief town in the Electoral District of Cornwall and Stormont is situated on the St. Lawrence River, 67 miles west of Montreal.

POST OFFICE, &c., BUILDING.

A clock has been placed in the tower, the tower ventilated and the clock room floored. (Appendix 2, page 35.)

GALT.

Galt, in the Electoral District of South Waterloo, is situated on the Grand River, 25 miles north-west of the City of Hamilton.

PUBLIC BUILDING.

Granolithic pavement was laid down along the street line of the building. (Appendix 2, page 35.)

GANANOQUE.

Gananoque, in the Electoral District of South Leeds, is situated at the mouth of the Gananoque River, which empties into the St. Lawrence, about 20 miles north-east of Kingston.

POST OFFICE.

The town authorities having granted a site, a contract has been entered into for the erection thereon of a 2½ story main building, 38 by 25 feet, with a one story annex, 25 by 25 feet, exclusive of vault. The walls are to be bricked, with stone dressings and stone foundations. (Appendix 2, page 55.)

 GODERICH.

Goderich, in the Electoral District of West Huron, is on the east shore of Lake Huron, at the mouth of the River Maitland.

During the year a Departmental dredge was engaged in opening a passage to 18 feet in depth through the shoal which forms off the entrance to the harbour. Dredging was also done alongside the wharves and between the piers. (Appendix 5, pages 73 and 80.)

 GUELPH.

Guelph, in the Electoral District of South Wellington, is situated on the River Speed, and is about 48 miles from Toronto by Grand Trunk Railway.

POST OFFICE.

The building was cleaned and repaired. (Appendix 2, page 35)

 HAMILTON.

The City of Hamilton is in the County of Wentworth, on Burlington Bay, at the western extremity of Lake Ontario.

DRILL SHED.

This building, which was described in my report of last year, was nearly completed at the 30th June.

POST OFFICE, &c.

The heating apparatus was altered and added to, and some fittings and furniture supplied. (Appendix 2, pages 35 and 36.)

 HILTON, OR MARKSDALE.

Hilton, or Marksdale, in Algoma County, is on the north side of St. Joseph Island, nearly opposite Bruce Mines, and about 50 miles from Sault Ste. Marie.

The work referred to in my report of last year as under construction, was completed in August, 1887.

 KAMINISTIQUIA RIVER.

The River Kaministiquia rises in Dog Lake, Algoma County, and empties into Thunder Bay, Lake Superior, near Port Arthur.

Further dredging was done to improve the navigation of the river, and the channel through the bar at its mouth was widened. The largest class of vessels navigating the upper lakes, can now go up to the large elevators at Fort William. (Appendix 5, page 75.)

 KINCARDINE.

Kincardine, in the Electoral District of West Bruce, is situated at the mouth of the River Penetangore, which empties into Lake Huron, 31 miles north of Goderich.

Sheet piling is being driven along the north face of the southern pier, to prevent its falling into the channel. A Departmental dredge operated from the 29th of August, to the 27th of October, giving a depth of 16 feet at low water between the piers, and removing obstructions in the basin. (Appendix 5, pages 73 and 80.)

KINGSTON.

Kingston is situated on the eastern shore of Lake Ontario, 172 miles west of Montreal.

PENITENTIARY.

Additions, alterations and improvements were made to the various buildings, officers' quarters, workshops, &c, and renewals and repairs were made generally where required, the details of which will be found in Appendix 2, pages 36 and 37.

HARBOUR.

Work was continued during the year on Point Frederick Shoal, 2,818 cubic yards of rock having been removed during the year. (Appendix 5, page 73.)

KINGSVILLE.

Kingsville, in the Electoral District of South Essex, is situated on Lake Erie, between Point Pelée and the Detroit River, about 25 miles east of Amherstburg.

Part of the superstructure of the western pier was rebuilt and stone rip-rap placed on the west side of the western pier to prevent undermining. (Appendix 5, page 73.)

LAKE OF THE WOODS.

The sum of \$7,000 was voted as aid towards the construction of a dam at Rat Portage, in the District of Keewatin, at the extreme end of the Lake of the Woods, and the dam having been completed the amount was paid to the proper authorities.

LINDSAY.

Lindsay, in the Electoral District of South Victoria, is on the River Scugog, 42 miles from Port Hope and 65 from Toronto.

POST OFFICE, CUSTOM, AND INLAND REVENUE OFFICES.

A site having been obtained a contract has been entered into by the Department for the erection of a building, the main part of which is to be 55½ by 47 feet, of two storeys, attic and basement, a clock tower, a basement and a one story annex, 57 by 23 feet. (Appendix 2, page 37.)

 LITTLE CURRENT.

Little Current, in the Electoral District of Algoma, is the channel between La Cloche and Manitoulin Islands, on the route to Sault Ste. Marie from Georgian Bay ports, and is about 140 miles north-west of Collingwood.

The work of increasing the width of the channel, referred to in my report of last year, was continued until the close of the working season of 1887. (Appendix 5, page 73.)

 SOUTH NATION RIVER.

This river takes its rise in the Township of Matilda, County of Dundas, and after an irregular course of about 100 miles, falls into the Ottawa at Plantagenet.

Operations were commenced in excavating a channel through a shoal of rock 670 feet in length, 12 miles below the Village of Casselman, and during the year a depth of 6 feet at low water had been obtained over a length of 170 feet. A Departmental dredge was engaged from the 2nd to the 19th of November in removing a deposit of sand which blocked the entrance to the river. (Appendix 5, pages 76 and 81.)

 LONDON.

London, in the County of Middlesex, is situated on the River Thames, 121 miles west of Toronto.

 CUSTOM HOUSE.

The enlargement of this building referred to in my report of last year was completed, and the offices so formed were fitted up and occupied.

 INFANTRY SCHOOL.

This building has been completed and occupied. (Appendix 2, page 37.)

 MIDLAND.

Midland, in the Electoral District of East Simcoe, is at the foot of Gloucester Bay, an arm of Georgian Bay, and is the terminus of the Midland Division of the Grand Trunk Railway.

The wharfing referred to in my report of last year was completed in February last. (Appendix 5, page 73.)

 MCGREGOR'S CREEK.

McGregor's Creek runs through the town of Chatham, County of Kent, and empties into the River Thames.

The pile protection work which had been commenced in the previous fiscal year was completed in September, 1887. (Appendix 5, page 73.)

 NAPANEE.

Napanee, the chief town of the County of Lennox, is situated on the Napanee River, 26 miles west of Kingston by the Grand Trunk Railway.

POST OFFICE AND CUSTOM HOUSE.

A lot having been acquired for a site for a public building, a contract has been entered into for the erection of a stone building, the main portion of which will be 48 by 58 feet of two storeys with attic and basement, a one story annex in the rear 21 by 46 feet, and on the street corner a clock tower. (Appendix 2, page 38.)

 OAKVILLE.

Oakville, in the County of Halton, is on Lake Ontario, 22 miles west of Toronto, and 18 miles east of Hamilton.

The work of rebuilding the outer 360 feet of the eastern pier commenced during the previous fiscal year was completed in October, 1887. The old portion of the eastern pier and the new work were connected, and the channel between the east and west piers dredged to a depth of 12 feet at low water. (Appendix 5, page 74.)

 ORANGEVILLE.

Orangeville, in the Electoral District of Centre Wellington, is situated on a branch of the Credit River, and is 40 miles from Toronto by the Toronto, Grey and Bruce Railway.

POST OFFICE.

A fire proof safe was supplied. (Appendix 2, page 38.)

 OTTAWA.

Ottawa, the Capital of the Dominion, comprises an Electoral District returning two members. It is situated on the south shore of the Ottawa River, and is 117 miles from Montreal by Canadian Pacific Railway.

PRINTING BUREAU.

Good progress has been made in the work of erecting the new printing bureau.

NEW DEPARTMENTAL BUILDING, WELLINGTON STREET.

Tenders have been invited for the iron staircases, and the heating apparatus will be advertised at an early date.

PARLIAMENT BUILDING.

The Speaker's apartments, House of Commons, were altered and repaired, and the usual and ordinary repairs to the building, furniture and fittings carried out.

EAST AND WEST BLOCKS.

The necessary repairs, cleaning, furnishing, fittings, &c., were executed and supplied.

VICTORIA HALL.

This building, on the corner of O'Connor and Queen streets, has been purchased and the upper portion altered and fitted up to accommodate the Canadian Art Gallery pictures, the Fisheries exhibit being retained on the ground floor.

PUBLIC BUILDINGS, REPAIRING STREETS, &c.

The streets over which the Department has assumed control were repaired and the sidewalks kept free of snow during the winter.

PARLIAMENT GROUNDS.

These grounds were efficiently maintained during the year.

MAJOR'S HILL PARK.

Further improvements were effected and the grounds kept in good order.

GEOLOGICAL MUSEUM.

An unfinished attic story in the adjoining building was leased, divided up and finished as offices.

CENTRAL EXPERIMENTAL FARM.

Contracts have been entered into for the erection of a residence for the Superintendent General of Experimental Farms; of 4 residences for the staff officials; for the necessary barn and stabling connected therewith; for a building for museum, laboratories and offices, full descriptions of which will be found in Appendix 2, pages 39 and 40.

GOVERNMENT HOUSE.

A new drying shed has been built in the garden, other buildings received necessary repairs. Drains were laid and the necessary furniture and carpets provided, and the usual cleaning, repairs, &c., carried out. (Appendix 2, page 40.)

RETAINING WALL, PARLIAMENT HILL.

A retaining wall of cribwork, 310 feet in length, and 23 feet in height, was built at the foot of the hill between the Rideau Canal and the dynamo house. (Appendix 5, page 75.)

OTTAWA CITY BRIDGES.

The various bridges under the control of the Department received general necessary repairs. (Appendix 10, page 134.)

OWEN SOUND.

Owen Sound, in the Electoral District of North Grey, is situated at the mouth of the Sydenham River, which empties into Georgian Bay.

A small quantity of dredging was done in this harbour.

PARRY SOUND.

Parry Sound is in the District of Muskoka, on the Georgian Bay, 65 miles from Collingwood.

Some obstructions were removed from the channel leading up to the wharves.

 PEMBROKE.

Pembroke, in the Electoral District of North Renfrew, is situated on Allumette Lake, an expansion of the Ottawa River, and is 86 miles from Ottawa by the Canadian Pacific Railway.

 POST OFFICE, &c.

A contract has been entered into for the construction of a 2½ story stone building, 44 by 50 feet, to accommodate the Post Office, Customs and Inland Revenue Offices. (Appendix 2, page 40.)

 PETERBORO'.

Peterboro', in the Electoral District of West Peterboro', is situated on the Otonabee River, about 94 miles north-east of Toronto.

 POST OFFICE.

The building has been completed, fitted up, furnished and provided with hot water heating apparatus. (Appendix 2, page 41.)

 PORTAGE DU FORT BRIDGE.

This bridge crosses the Ottawa at Portage du Fort, 60 miles above the city of Ottawa.

The approach to the bridge on the Ontario side was widened 20 feet and the whole of the superstructure of the bridge painted. (Appendix 5, page 74.)

 PORT ALBERT.

Port Albert is on the eastern shore of Lake Huron, about 9 miles north of Goderich.

The piers forming this harbour were repaired and the work was nearing completion at the close of the fiscal year. (Appendix 5, page 74.)

 PORT ARTHUR.

Port Arthur, in the County of Algoma, is on Thunder Bay, Lake Superior.

The extension of the breakwater 1,600 feet in an easterly direction, and referred to in my report of last year is nearing completion.

Several lumps in the harbour, between the breakwater and the wharves, were removed by a dredge, and the channel deepened at the elevator dock. (Appendix 5, page 74.)

 PORT ELGIN.

Port Elgin is on Lake Huron, 24 miles north of Kincardine, in the County of Bruce.

The groyne referred to in the report of last year was completed. Dredging was also done over a portion of the harbour to give easier access to the landing pier. (Appendix 5, page 74.)

PORT HOPE.

Port Hope is on the north shore of Lake Ontario, 8 miles to the eastward of Cobourg.

Portions of the superstructure of the east pier, and of the railway wharf were repaired, and a bar which had formed off the entrance to the harbour was removed by a departmental dredge. (Appendix 5, pages 75 and 81.)

PORTSMOUTH.

Portsmouth is situated on the Bay of that name, 2 miles west of Kingston.

During the year the work of renewing the upper 7 feet of this pier, over its whole length, was commenced, and is still in progress. (Appendix 5, page 75.)

PRESCOTT.

Prescott, in the Electoral District of South Grenville, is situated on the north shore of the St. Lawrence, 112 miles west of Montreal.

POST OFFICE, CUSTOM HOUSE AND INLAND REVENUE OFFICES.

A site having been acquired on South King street and North Water street, a contract has been entered into for the construction of two buildings each $2\frac{1}{2}$ stories, 49 by 28 feet, with brick walls on stone foundations, the Post Office fronting on King street, the Custom House on Waterstreet. (Appendix 2, page 41.)

RIVER AUX PÊCHES.

The River aux Pêches flows through the County of Essex and empties into Lake St. Clair.

A further length of 400 feet of pile protection work has been built at the mouth of the river. (Appendix 5, page 75.)

RIVER OTTAWA.

The Ottawa River flows from Lake Temiscamingue and empties into the St. Lawrence at Ste. Anne de Bellevue, forming for a great part of its length the boundary between Ontario and Quebec.

NARROWS ABOVE PEMBROKE.

Dredging on the shoals in this portion of the river was continued during a part of the fiscal year. (Appendix 5, page 75.)

 RONDEAU HARBOUR.

Rondeau Harbour, Kent County, is on the north shore of Lake Erie, 140 miles above Port Colborne.

Slight repairs were made to the east and west piers and the piling on the eastern side of the east pier. (Appendix 5, page 75.)

 SAUGEEN RIVER PIER.

This pier is situated at the mouth of the Saugeen River, which empties into Lake Huron at the village of Southampton.

The reconstruction of the superstructure of the old pier referred to in my report of last year as being in hand, was completed in July, 1887. (Appendix 5, page 75.)

 SOUTHAMPTON.

Southampton, in the Electoral District of North Bruce, is situated at the mouth of the Saugeen River, which empties into Lake Huron.

The outer end of the landing pier was rebuilt and a portion of the eastern breakwater filled with stone and re-planked. (Appendix 5, page 76.)

 ST. CATHARINES.

St. Catharines, in the Electoral District of Lincoln and Niagara, is situated on the Welland Canal, about 32 miles east of Hamilton.

 POST OFFICE.

A maple floor was laid down and the building ordinarily repaired. (Appendix 2, page 41.)

 ST. THOMAS.

St. Thomas, in the Electoral District of East Elgin, is on the Great Western Division of the Grand Trunk Railway and on the Canada Southern Railway, and is about 15 miles from London.

 POST OFFICE, &c., BUILDING.

An iron fence was put up on the Talbot street front, and general repairs executed. (Appendix 2, page 41.)

 THORNBURY.

Thornbury, in the Electoral District of East Grey, is situated at the mouth of the Beaver River, which flows into the Georgian Bay, 13 miles from Collingwood.

Further dredging was done during the year to improve the harbour and make it more easy of access.

TORONTO.

Toronto, this principal city in the Province of Ontario, is situated on Lake Ontario, 161 miles west of Kingston, and comprises the Electoral Districts of East, Centre and West Toronto.

CUSTOM HOUSE.

The collector's offices and steamboat inspection office were supplied with different articles of furniture.

EXAMINING WAREHOUSE.

New boiler, engines and an elevator were placed in the building and old machinery altered. General repairs were also made to the original portions of the building.

POST OFFICE.

The interior of the building and the Peter street branch office were repaired. (Appendix 2, page 42.)

HARBOUR.

A further quantity of large stone was deposited on the seaward side of the Island Protection Works.

TRENTON.

Trenton, in the Electoral District of West Hastings, is on the Trent River, at its entrance into the Bay of Quinté, 101 miles east of Toronto.

POST OFFICE, &C.

A 2½ story main building, 40 by 49 feet, with a one story annex, 34 by 18 feet, is under course of erection at this place. (Appendix 2, page 42.)

PROVINCE OF MANITOBA.

BRANDON.

Brandon, the centre of rich agricultural lands is 130 miles west of Winnipeg.

IMMIGRANT BUILDING.

The woodwork was repaired and painted. (Appendix 2, page 42.)

RED RIVER.

The Red River flows from the south and empties into Lake Winnipeg.

Dredging was carried on during the year in the west slough near West Selkirk, in the channel at the mouth of the river, at Salimony's Channel, about ½ miles from the mouth, and at West Selkirk. (Appendix 5, pages 76 and 82.)

WHITE MUD RIVER.

The White Mud River empties into Lake Manitoba, 9 miles north of Westbourne.

A Departmental dredge worked during the year on the shoal at the mouth of the river and in the river itself between Totogan and McArthur's Landing. (Appendix 5, pages 76 and 82.)

STONY MOUNTAIN.

Stony Mountain, in the Electoral District of Lisgar, is situated on the Stonewall Branch of the Canadian Pacific Railway, 13 miles north-east of Winnipeg.

PENITENTIARY.

The hospital and laundry, new chapels, Warden's store and fuel building and cottages for the guards were completed during the year. The Warden's residence was fitted up with gas and electric bells; furniture &c., were supplied and other work done. Various other additions and improvements were made to the building generally. (Appendix 2, pages 42 and 43.)

WINNIPEG.

Winnipeg, the Capital of Manitoba, and forming the Electoral District of Winnipeg, is situated at the confluence of the Red and Assiniboine Rivers.

CUSTOM HOUSE.

Minor repairs were made and some furniture supplied.

INFANTRY SCHOOL.

This building has been completed and transferred to the Department of Militia.

POST OFFICE.

The top story of the building has been fitted up and furnished as offices for the Dominion Land's Branch. Other works of improvement and alterations were effected. (Appendix 2, page 43.)

NORTH-WEST TERRITORIES.

BATTLEFORD.

Battleford, in the District of Saskatchewan, is situated on the north-west branch of the River Saskatchewan, about 250 miles north of Swift Current, which is 511 miles west of Winnipeg by Canadian Pacific Railway.

MOUNTED POLICE BUILDINGS.

The guard house was repaired and renewed, and barracks finished. (Appendix 2, page 44.)

CALGARY.

Calgary, in the District of Alberta, is situated on the Bow River, 839 miles west of Winnipeg by the Canadian Pacific Railway.

BARRACKS.

Contracts have been entered into for the construction of the various buildings connected with the Mounted Police barracks at this place, details of which will be found in Appendix 2, pages 43, 44.

 EDMONTON.

Edmonton is situated on the north branch of the Saskatchewan, and 930 miles north-west of Winnipeg.

COURT HOUSE.

Fittings and furniture were supplied. (Appendix 2, page 44.)

 FORT SASKATCHEWAN.

Fort Saskatchewan, in the District of Alberta, is 200 miles from Calgary, the nearest railway station.

The Mounted Police barracks were repaired and enlarged. (Appendix 2, page 47.)

 LETHBRIDGE.

Lethbridge, in Alberta District, is the terminus of the North-West Coal and Navigation Company's Railway from Dunmore on the Canadian Pacific Railway, from which it is 110 miles distant.

MOUNTED POLICE BUILDINGS.

Existing buildings were remodelled and enlarged, and various other buildings for Officers' quarters, Quartermaster's store and offices, saddle-room, shops, &c., were built. (Appendix 2, page 44.)

 MAPLE CREEK.

Maple Creek, in the District of Assiniboia, is a station on the main line of the Canadian Pacific Railway, 596 miles west of Winnipeg.

A log house for an outpost for the Mounted Police was erected, a similar building being built at Touchwood Hill and Wood Mountain. (Appendix 2, page 45.)

 MEDICINE HAT.

Medicine Hat, in the District of Assiniboia, is on the main line of the Canadian Pacific Railway, 660 miles west of Winnipeg.

BARRACKS.

The woodwork was painted and ordinary repairs executed. (Appendix 2, page 45.)

 McLEOD.

Fort McLeod, in the District of Alberta, is situated on Old Man's River, 102 miles south of Calgary and 30 miles from Lethbridge, which is the nearest railway station.

CUSTOM HOUSE.

A one and a-half story building to serve as a Custom House and Bonded Warehouse was erected.

BARRACKS.

New chimneys were built and ordinary repairs executed. (Appendix 2, page 44.)

NORTH SASKATCHEWAN RIVER.

The Saskatchewan River rises in the Rocky Mountains, and after a course of about 1,200 miles empties into Lake Winnipeg.

A further number of boulders and sand bars were removed from the north branch. (Appendix 5, page 76.)

PRINCE ALBERT.

Prince Albert, in the District of Saskatchewan, is situated on the Saskatchewan River, about 200 miles north-west of Qu'Appelle, the nearest station on the Canadian Pacific Railway.

COURT HOUSE AND GAOL.

This building which was described in my report of last year, has been completed, fitted up and occupied, and various other additions and improvements made.

NORTH-WEST MOUNTED POLICE BUILDINGS.

Various necessary buildings in connection with the police service have been completed. (Appendix 2, page 45.)

QU'APPELLE.

Fort Qu'Appelle, in the District of Assiniboia, is situated on the Qu'Appelle River, 20 miles from Qu'Appelle Station on the Canadian Pacific Railway.

INDUSTRIAL SCHOOL.

The addition to be used as a school for girls, and referred to in my report of last year, is nearly completed. (Appendix 2, page 45.)

REGINA.

Regina, the Capital of the North-West Territories, is in the District of Assiniboia, 356 miles west of Winnipeg by Canadian Pacific Railway.

COURT HOUSE.

The interior was cleaned, &c., and supplied with furniture, necessary fittings and stoves.

GAOL AND LUNATIC ASYLUM.

Fences and outbuildings were erected, a wellhouse built and a force pump put in building.

INDIAN OFFICES.

A stone foundation was built under the building, the walls were veneered with brick, and outside woodwork painted.

LIEUTENANT-GOVERNOR'S RESIDENCE.

Some necessary repairs were made.

MOUNTED POLICE BUILDINGS.

The various buildings connected with the Mounted Police Force were fully described in my report of last year, since which time they have been completed and occupied.

NORTH-WEST COUNCIL CHAMBER.

The chamber was repapered and repainted.

POST OFFICE.

Minor repairs were effected. (Appendix 2, page 46.)

PROVINCE OF BRITISH COLUMBIA.

COWICHAN RIVER.

The work of improving the channel of the river was continued during the past fiscal year. (Appendix 2, page 76.)

ESQUIMALT GRAVING DOCK.

Esquimalt, in the Electoral District of Victoria, is situated on the Strait of San Juan de Fuca, about 3 miles from the City of Victoria.

The dock which was opened in July, 1887 by the entrance of H. M. S. "Cormorant," has been supplied with electric light apparatus, and an ample supply of fresh water. (Appendix 5, page 76.)

FRASER RIVER.

The Fraser, the largest river in British Columbia, rises in the Rocky Mountains, and after a course of about 700 miles empties into the Gulf of Georgia.

The improvement of the north channel across the sand banks at the mouth of the river was continued during the year, and the Snag Boat "Samson" was engaged in removing snags from the channel over a length of 90 miles from the mouth upwards. (Appendix 5, pages 76, 83.)

NANAIMO.

Nanaimo, in the Electoral District of Vancouver, is on the eastern coast of Vancouver Island, on the Gulf of Georgia, 70 miles from Victoria.

POST OFFICE.

Some repairs and improvements were made. Gas was laid in the building and the water pipes extended to the first floor. (Appendix 2, page 47.)

HARBOUR.

During the year the removal of the Nicol rock was commenced and on the 30th June the work was well in hand. (Appendix 5, page 77.)

 NEW WESTMINSTER.

New Westminster, in the Electoral District of the same name, is situated on the north bank of the Fraser River, about 75 miles from Victoria.

PENITENTIARY.

Various works of improvement which were in hand have been completed during the fiscal year, and other works undertaken.

PUBLIC BUILDING.

Gas fittings have been supplied and some alterations and repairs made to the first floor. (Appendix 2, page 47.)

 NICOMECKEL RIVER.

The "cut off" at the Big Bend has been enlarged. (Appendix 5, page 77.)

 SERPENTINE RIVER.

A ditch or "cut off" about one and a-half miles in length was excavated and has proved most effective in preventing the flooding of adjacent lands. (Appendix 5, page 77.)

 SOMAS RIVER.

The river was cleared of snags and obstructions from its mouth to the steam-boat landing. (Appendix 5, page 77.)

 VICTORIA.

Victoria, the Capital of British Columbia, is situated on the south-east extremity of Vancouver Island, and forms an Electoral District returning two members.

The Departmental dredge was engaged during the working season of 1887 in removing clay and boulders from around the site of the Dredger Rock, and during the early part of 1888 in deepening in the harbour off Shoal Point. (Appendix 5, pages 77, 82, 83.)

 DREDGES.

A list of the dredging plant belonging to the Department will be found in Appendix 5, page 83.

In Appendix No. 5, pages 84 to 110 will be found tables giving details of the disbursements of the various dredges, as well as the classification and quantities of materials removed, and other tables of interest.

ENGINEERS, ENGINEMEN, FIREMEN AND CARETAKERS.

A list of the various engineers, &c., employed in the Public Buildings throughout the Dominion with salaries paid them, &c., will be found in Appendix No. 3, pages 50, 51, 53.

DOMINION BUILDINGS.

The amounts expended in connection with heating, lighting and water of the various Public Buildings throughout the Dominion will be found in Appendix No. 1, pages 10, 11, 12.

PUBLIC BUILDINGS, OTTAWA.

The report of the Chief Mechanical Engineer on the maintenance of the heating, gas, water and bell services of the various Public Buildings in Ottawa will be found in Appendix No. 4, pages 55, 56.

SURVEYS AND EXAMINATIONS.

During the year surveys and examinations were made at 119 places, a list of which will be found in Appendix No. 5, pages 77, 73.

SLIDES AND BOOMS.

SAGUENAY DISTRICT.

The slide and booms to facilitate the descent of timber from Lake St. John to the River Saguenay are situated on La Petite Décharge, the smaller of the two outlets from the lake to the river. The slide is 5,840 feet long, and the booms 1,344 feet.

The reconstruction of the slide was completed during the year and necessary repairs were made to the booms, dams and anchor piers. (Appendix 8, page 123.)

ST. MAURICE DISTRICT.

The works on the St. Maurice are situated at seven stations, from the mouth of the river to La Tuque Falls, a distance of 100 miles; and there are also two stations on the Vermillion River, a tributary of the St. Maurice.

Owing to the lateness of the spring the usual quantity of logs taken out in the upper waters of the St. Maurice had not at the end of the fiscal year arrived at the booms at the mouth.

Owing to the care taken in passing timber, the works did not receive much damage. Repairs were made where necessary to the works at the different stations, the details of which will be found in Appendix No. 9, pages 127, 128, 129.

 OTTAWA DISTRICT.

This district embraces the Ottawa River and its tributaries, the Gatineau, Madawaska, Coulonge, Black, Petewawa and Dumoine Rivers. There are on it altogether eighty-three stations, and the works for facilitating the descent of timber aggregate about one mile of canal, over three miles of slides, nearly thirteen miles of booms and over seventeen thousand lineal feet of dams, with bulkheads, piers, glance piers, &c., in proportion.

The very low stage of water was experienced in this river as in others of the Dominion, causing considerable delay in the "drives," many of them having to be abandoned for the season.

The dryness of the season was the cause of many extensive bush fires which damaged the exposed portions of several of the dams on the Madawaska.

A description of the repairs, reconstruction and construction carried out on the river and its tributaries will be found in Appendix No. 10, pages 133 to 136.

 NEWCASTLE DISTRICT.

The works in this district are of two classes: Those connected with navigation, which are under the control of the Department of Railways and Canals, and those constructed to facilitate the descent of timber down the River Trent and its tributaries, which are under the control of the Department of Public Works.

The water in the district stood at a fair average height, the spring freshet passing away without doing any considerable amount of damage to the different works.

A description of the various works of repairs effected at the different stations will be found in Appendix No. 11, pages 139, 140.

 STAFF EMPLOYED ON SLIDES AND BOOMS.

A list of the staff employed on the different slides and booms, with date of appointment, salary &c., will be found in Appendix No. 12, pages 143 to 145.

 ROADS.

 TEMISCOUATA ROAD.

This road extends from River du Loup (en bas) to the boundary between the Provinces of Quebec and New Brunswick, a distance of 67 miles.

The roadway, culverts and bridges were repaired where necessary. (Appendix 5, page 72.)

 BRIDGES.

 BATTLE RIVER.

A contract has been entered into for the construction of a bridge across the Battle River at Battleford, N. W. T., and at the close of the fiscal year no progress had been made with the work.

 BOW RIVER.

This bridge which crosses the Bow River at Calgary, N. W. T., and to which reference was made in my report of last year, has been completed.

 TELEGRAPHS.

The various lines owned and operated by the Government or on behalf of the Government were maintained in a state of efficiency during the year.

Besides the completion by the Great North-Western Telegraph Company of the line from Colpoys Bay to Tobermory, Ontario, a distance of 56 miles, no extensive work beyond that of repoling was executed during the year. Full details, with tables giving the distances, names of operators and salaries paid, on the different lines, will be found in the report of the Superintendent of Government Telegraph Lines. (Appendix 13, pages 149 to 168.)

 SHIP CHANNEL BETWEEN MONTREAL AND QUEBEC.

The work of deepening to 27½ feet the channel in the St. Lawrence between Montreal and Quebec, was continued by the Harbour Commissioners of Montreal during the fiscal year. A description of the work done will be found in Appendix No. 6, pages 113 to 115.

 QUEBEC HARBOUR IMPROVEMENTS.

The report of the Harbour Commissioners of Quebec on the works under their charge will be found in Appendix No. 7, page 119.

 OPENING AND CLOSING OF NAVIGATION.

Appendix No. 14, pages 171 and 172, gives a statement of the dates of the closing of navigation in the winter of 1887, and of the opening in 1888, at the principal ports of Canada, a list of the ports which are always open is also given.

 NATIONAL ART GALLERY.

The pictures which had formerly occupied a room over the Supreme Court have been removed to the present gallery over the Fisheries Exhibit on O'Connor St.; the gallery was fitted up for that purpose.

Some additions have been made to the pictures during the year, and the curator reports a steady increase in the number of visitors. (Appendix 17, page 189.)

 CONTRACTS, PROPERTY PURCHASED, &c.

Appendix No. 15, pages 175-184, contains statements of the contracts entered into by the Department, of property purchased by the Department, and of property leased by or to the Department, during the fiscal year.

ACTS RELATING TO PUBLIC WORKS.

Appendix No. 16, page 185, contains a list of some of the Public Acts of the Parliament of Canada, passed at the Session of 1888 and having reference to the Public Works Department or works under its charge.

DEPARTMENTAL STAFF.

In appendix No. 18, pages 192 and 193, will be found a list of the Members, Commissioners, and Assistant Commissioners of the Board of Works of the Province of Canada from 1841 to 1867; and of the Ministers, Deputy Ministers, Secretaries, Chief Engineers and Chief Architects of the Department of Public Works, from Confederation to 30th June, 1888.

OFFICIAL CORRESPONDENCE.

Appendix No. 19, page 197, contains a statement of the official correspondence of the Department from 1867 to 30th June, 1888.

YEARLY EXPENDITURE ON PUBLIC WORKS.

Appendix No. 20, page 201, contains an abstract statement of yearly expenditure in each Province, on construction and improvements of Public Works from 1st July, 1867, to 30th June, 1887.

ENGINEERS AND ASSISTANTS.

Appendix No. 21, pages 203 to 221, contains a list (as far as could be ascertained) of engineers and their assistants employed on Public Works of Canada from 1815 to 1889. Attention is called to the note of the Deputy Minister of Public Works on page 203.

TABLES OF DISTANCES.

The supplement to my report for the preceding fiscal year contains various tables and memoranda relating to the inland navigation of Canada, the elevations of the St. Lawrence, Lake Champlain and River Hudson, above mean sea level, the ocean routes from Canada and the United States to foreign countries, the Canadian land routes to the sea board, the Government railways and telegraph lines, the Canadian and United States route from Liverpool to Japan, the Canadian Pacific Railway, Suez Canal and Panama Canal routes, and the cost of the public works of Canada, and these have been omitted from this report, the supplement having been published in 1888.

HECTOR L. LANGEVIN,
Minister of Public Works.

OTTAWA, January, 1889.

APPENDICES.

APPENDIX No. 1.

STATEMENT OF EXPENDITURE

DURING FISCAL YEAR ENDED 30TH JUNE, 1888.

BY

O. DIONNE, ACCOUNTANT.

(Reference No. 93,012.)

APPENDIX No. 1.

STATEMENT showing the Amount expended by the Department of Public Works,
Dominion of Canada, during the Fiscal Year ended 30th June, 1883.

Name of Work.	Con- struction.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
PUBLIC BUILDINGS.				
GENERALLY			11,351 67	11,351 67
<i>Nov 3 Scotia.</i>				
Amherst Post Office, &c	566 84			566 84
Antigonish do		113 30		113 30
Arichat do		150 07		150 07
Baddeck do	892 75			892 75
Halifax Dominion Building	959 08	512 00		1,471 08
do Examining Warehouse		1,760 81		1,760 81
do Penitentiary		2,123 81		2,123 81
Lunenburg Post Office, &c		53 27		53 27
Nappan Experimental Farm	44 28			44 28
New Glasgow Post Office, &c.		238 83		238 83
North Sydney do	6,220 14			6,220 14
Pictou Custom House Heating apparatus	2,672 99	439 60		3,112 59
Sydney Marine Hospital	1,106 48			1,106 48
do (South) Quarantine Station.	564 21	304 00		868 21
do do Post Office	0 45			0 45
Truro Post Office, &c.		83 23		83 23
Windsor do		286 98		286 98
Yarmouth do	3,974 95	30 00		4,004 95
<i>Prince Edward Island.</i>				
Charlottetown Dominion Building (New)	10,346 34	2,144 75		12,491 09
Montague Post Office, &c	1,908 30			1,906 30
Summerside do	0 07	8 02		98 09
<i>New Brunswick.</i>				
Bathurst Post Office, &c	2,973 41			2,973 41
Carleton (St. John) Post Office		38 35		38 35
Chatham Post Office		145 91		145 91
do Quarantine Building.		480 84		480 84
Dalhousie Post Office, &c	545 73			545 73
Dorchester Penitentiary	8,397 91			8,397 91
Fredericton Post Office, &c.		2,080 70		2,080 70
Kingston Marine Hospital.		282 26		282 26
Middle Island Quarantine Station		10 00		10 00
Moncton Post Office, &c.	234 93	85 35		320 28
Newcastle do	4,233 03	64 12		4,297 15
Portland do	1,625 39	147 98		1,773 37
St. John Custom House	1,514 55	406 87		1,921 42
do Fort Dufferin		116 46		116 46
Carried forward	48,869 83	12,107 51	11,351 67	72,329 01

APPENDIX No. 1—Continued.

Name of Work.	Con- struction.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward.....	48,869 83	12,107 51	11,351 67	72,329 01
PUBLIC BUILDINGS—Continued.				
<i>New Brunswick—Concluded.</i>				
St. John Marine Hospital.....	258 20	15 20		273 40
do Post Office.....	560 53	228 43		788 96
do Savings Bank.....	268 77	457 01		725 78
St. Stephen's Post Office, &c.....	2,217 41	73 07		2,290 48
Sussex do.....		30 35		30 35
Woodstock do.....	1,800 35			1,800 35
<i>Quebec.</i>				
Aylmer Post Office, &c.....	1,205 68			1,205 68
Carillon Canal Office.....		22 91		22 91
Chicoutimi Marine Hospital.....		796 50		796 50
Coaticook Post Office, &c.....	451 64			451 64
Dundas Custom House.....		39 00		39 00
Grosse Ile Quarantine Station.....	3,819 28			3,819 28
Hull Post Office, &c. (New).....	7,573 91	55 00		7,628 91
Joliette do.....	4,305 60			4,305 60
Lévis Cattle Quarantine Building, &c.....	375 20			375 20
Maria Indian Reserve Chapel.....	500 00			500 00
Montreal Armouries.....	44,928 04			44,928 04
do Civil Service Examination Office.....		50 00		50 00
do Custom House.....	15,176 78	80 00		15,256 78
do Drill Shed.....		328 72		328 72
do Examining Warehouse.....	869 62	52 17		921 79
do Inland Revenue Building.....		42 50		42 50
do Post Office.....	9,564 97	1,559 70		11,124 67
Quebec Citadel Buildings.....		1,945 78		1,945 78
do do "Cliff".....	6,025 74			6,025 74
do Civil Service Examination Office.....		4 50		4 50
do Clerk of Works Offices.....		440 00		440 00
do Cutlers' Office.....		774 65		774 65
do Custom House.....	6,619 83	100 00		6,719 83
do Drill Hall.....	4 625 00			4,625 00
do Examining Warehouse.....	2,235 58	14 00		2,249 58
do Immigrant Building.....	27,916 38			27,916 38
do Marine Hospital.....		253 77		253 77
do Observatory.....	612 47			612 47
do Old Parliament Building, site, rent, &c.....			2,397 22	2,397 22
do Post Office.....	357 08	692 72		1,049 80
do Queen's Wharf Buildings.....	1,480 80			1,480 80
Sherbrooke Post Office, &c.....	201 58	170 08		371 66
Sorel do.....	4,744 82			4,744 82
Sts. Anne de Bellevue Inland Revenue Office.....		80 00		80 00
St. Jérôme Post Office, &c.....	1,681 36			1,681 36
St. John's Barracks.....		50 00		50 00
do Post Office, &c.....		150 00		150 00
St. Régis Custom House.....		177 50		177 50
St. Vincent de Paul Penitentiary.....	37,324 87			37,324 87
Three Rivers Custom.....	3,317 90	31 10		3,349 00
do Post Office.....	829 57	48 62		878 19
Carried forward.....	240,728 79	20,869 79	13,748 89	275,347 47

APPENDIX No. 1—Continued.

Name of Work.	Con- struction.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward.....	240,728 79	20,869 79	13,748 89	275,347 47
PUBLIC BUILDINGS—Continued.				
<i>Ontario.</i>				
Amherstburg Post Office, &c.....		203 55		203 55
Barrie do.....	3,725 68	6 50		3,732 18
Belleville do.....		141 25		141 25
Berlin do.....	547 45	22 38		569 83
Brampton do.....	27 20			27 20
Brantford do.....	23 00	39 46		62 46
Brockville do.....	717 97			717 97
Cayuga do.....	1,800 50			1,800 50
Chatham do.....	18 30	36 76		55 06
Clifton do.....		45 38		45 38
Cobourg do.....	1,406 78			1,406 78
Cornwall do.....	2,668 35	265 01		2,933 36
Dundas do.....	2,249 00	1,000 00		3,249 00
Galt do.....	1,070 77	12 95		1,083 72
Gananoque do.....	4,862 55			4,862 55
Goderich do.....	1,054 69			1,054 69
Geolph do.....	544 46			544 46
Hamilton Custom House (Old).....		9 60		9 60
do Drill Hall.....	42,509 52			42,509 52
do Immigration Station.....	313 70			313 70
do Post Office, &c.....	3,757 95	235 54		3,993 49
Kingston Civil Service Examination Offices.....		26 40		26 40
do Custom House.....	7 20			7 20
do Military College.....	575 01	14 00		589 01
do Penitentiary.....	17,398 22			17,398 22
do Post Office.....		1,063 26		1,063 26
Lindsay do &c.....	4,190 44			4,190 44
London Custom House.....	14,963 75	752 50		15,716 25
do Infantry School.....	30,088 96			30,088 96
do Post Office.....		1,332 74		1,332 74
Napanee do &c.....	4,718 39			4,718 39
Orangeville do &c.....	329 52	8 90		338 22
Ottawa Central Fire Station (Government grant to Corporation).....	15,000 00			15,000 00
do Examining Warehouse.....	116 45	1,765 83		1,882 28
do Experimental Farm.....	54,761 52			54,761 52
do Geological Museum.....		1,671 71		1,671 71
do do gas.....			674 80	674 80
do National Art Gallery.....			1,180 35	1,180 35
do Post Office, &c.....	369 75	3,553 13		3,922 88
do do gas.....			1,961 00	1,961 00
do Printing Bureau.....	53,112 41			53,112 41
do do (temporary).....		738 33	775 00	913 33
do Public Buildings.....		138,304 62		138,304 62
do do Gas.....			15,741 67	15,741 67
do do Grounds.....			10,370 28	10,370 28
do do Heating.....			54,721 36	54,721 36
do do Indian Affairs—Gas.....			383 90	383 90
do do Main Tower (W.B.) re-cov- ering.....	2,783 71			2,783 71
do do Major's Hill Park.....			8,763 66	8,763 66
Carried forward.....	806,441 79	172,119 59	107,720 91	786,282 29

APPENDIX NO. 1—Continued.

Name of Work.	Con- struction.	Repairs.	Staff and Maintenance	Total.
	\$ cts	\$ cts	\$ cts.	\$ cts.
Brought forward.....	506,441 79	172,119 59	107,720 91	786,282 29
PUBLIC BUILDINGS—Continued.				
<i>Ontario—Concluded.</i>				
Ottawa, Public Buildings, Parl't Bdg.—Library...	3,046 06	.....	.....	3,046 06
do do do Re-covering	.....	.....	.....	.....
do do do Lean-to Roof	1,958 87	.....	.....	1,958 87
do do do Speakers' Ap- partments ...	5,258 63	.....	.....	5,258 63
do do do Ventilation, Electric Lighting, &c...	817 85	.....	.....	817 85
do do Removal of Snow .....	.....	.....	2,034 94	2,034 94
do do Telephonic Service.....	.....	.....	2,706 41	2,706 41
do do Water .....	.....	.....	13,537 75	13,537 75
do do Wellington Street Block	118,673 40	.....	.....	118,673 40
do Supreme Court.....	2,893 62	317 42	.....	3,211 04
do Victoria Hall—Purchase of and Fitting up	15,326 40	.....	.....	15,326 40
Pembroke Post Office, &c	2,408 60	.....	.....	2,408 60
Peterborough do	13,138 98	.....	.....	13,138 98
Port Arthur Immigrant Shed .....	.....	117 00	.....	117 00
do Dalhousie Canal Office .....	.....	150 12	.....	150 12
do Hope Post Office, &c	2,837 69	9 00	.....	2,846 69
Prescott do	4,328 09	.....	.....	4,328 09
Rideau Hall.....	.....	23,272 21	.....	23,272 21
do Gas—New Edinburgh Street Lamps..	.....	.....	316 68	316 68
do Allowance for fuel and light.....	.....	.....	8,000 00	8,000 00
do Removal of Snow .....	.....	.....	703 96	703 96
St. Catharines Post Office, &c .....	.....	58 09	.....	58 09
St. Thomas do	111 27	.....	.....	111 27
Stratford do .....	.....	455 18	.....	455 18
Toronto Civil Service Examination Offices..	.....	99 91	.....	99 91
do Custom House.....	282 35	14 04	.....	296 39
do Examining Warehouse	15,667 08	683 76	.....	16,350 84
do Immigrant Shed	173 44	256 71	.....	430 15
do Inland Revenue Office.....	.....	61 00	.....	61 00
do Post Office.....	3,117 76	41 67	.....	3,159 43
Trenton do &c	6,257 72	.....	.....	6,257 72
Windsor do &c	132 70	105 85	.....	238 55
<i>Manitoba.</i>				
Brandon Experimental Farm	44 80	.....	.....	44 80
do Immigrant Shed.....	248 82	.....	.....	248 82
do Post Office.....	21 50	.....	.....	21 50
Stony Mountain Penitentiary.....	58,836 10	.....	.....	58,836 10
Winnipeg Architect's Office .....	.....	935 97	.....	935 97
do Custom House.....	418 61	10 00	.....	428 61
do Dominion Lands Office .....	.....	11 10	.....	11 10
do Immigrant Buildings	5,041 65	438 58	.....	5,480 23
do Mounted Infantry School.....	2,216 85	.....	.....	2,216 85
do Post Office.....	10,608 42	51 23	.....	10,659 65
do Powder Magazine.....	957 50	.....	.....	957 50
Carried forward.....	781,166 55	199,208 43	135,020 65	1,115,395 63

APPENDIX No. 1—Continued.

Name of Work.	Con- struction.	Repairs.	Staff and Maintenance	Total.
	\$ cts	\$ cts.	\$ cts.	\$ cts.
Brought forward	781,166 55	199,208 43	135,020 65	1,115,295 63
PUBLIC BUILDINGS—Continued.				
<i>North-West Territories.</i>				
Banff Mounted Police Barracks	529 73			529 73
Battleford do	8,630 27			8,630 27
Calgary Court House	10 00	11 05		21 05
do Mounted Police Barracks	1,811 51			1,811 51
Cypress Hills do	1,000 00			1,000 00
Fort McLeod do	1,025 42			1,025 42
Fort Saskatchewan do	2,000 00			2,000 00
Indian Head Experimental Farm	9 87			9 87
Lethbridge Mounted Police Barracks	20,121 54			20,121 54
Long Lake Industrial School	36 62			36 62
Maple Creek Mounted Police Barracks	642 00			642 00
Medicine Hat do	351 43			351 43
McLeod Custom House	4,300 59			4,300 59
do General Hospital	1,000 00			1,000 00
Prince Albert Court House and Jail	9,897 38	32 47		9,9 85
do Mounted Police Barracks	59,788 97			59,788 97
Public Buildings generally			2,059 21	2,059 21
Qu'Appelle Industrial School	11,512 97			11,512 97
Regina Court House	3,387 10	46 96		3,434 16
do Jail and Lunatic Asylum	5,747 96	133 14		5,881 10
do Lieut-Governor's Residence	296 69			296 69
do Mounted Police Barracks	31,653 85			31,653 85
do North-West Council Chamber	167 66			167 66
do Public Buildings—Dam for water supply	740 02			740 02
do Riding Hall		413 60		413 60
Touchwood Hill Mounted Police Barracks	413 00			413 00
Wood Mountain do	1,565 60			1,565 60
<i>British Columbia.</i>				
Agassiz Experimental Farm	61 76			61 76
Nanaimo Post Office, &c	220 75	150 88		371 63
New Westminster Land Office		42 00		42 00
do Penitentiary	18,561 43			18,561 43
do Post Office, &c	440 45	1,063 49		1,503 94
Victoria Assistant Receiver-General's Office	2,202 00			2,202 00
do Custom House		120 91		120 91
do Post Office		1,392 62		1,392 62
do Quarantine Station		30 00		30 00
<i>England.</i>				
London High Commissioner's House		245 01		245 01
Carried forward	959,293 22	202,890 56	137,079 86	1,309,263 64

APPENDIX No. 1—Continued.

Name of Work.	Construction.	Repairs.	Staff and Maintenance	Total.
PUBLIC BUILDINGS—Continued.				
Brought forward.....	\$ 969,293 22	\$ 202,890 56	\$ 137,079 86	\$ 1,309,263 64
EXPENDITURE ON ACCOUNT FOLLOWING SERVICES.	Salaries of Engineers, &c.	Heating.	Lighting.	Water.
<i>Nova Scotia.</i>	\$ cts.	\$ cts.		
Amherst Post Office.....	457 23	260 06	56 15	773 44
Antigonish do	45 00			45 00
Aricuat do		102 00		102 00
Baddeck do	200 00	87 50	37 33	324 88
Halifax Dominion Building.....	2,261 59	956 91	2,052 00	975 00
do Examining Warehouse.....	508 80	52 35	33 00	189 90
do Penitentiary	450 00	44 13	9 00	
New Glasgow Post Office	439 75	175 74	88 23	12 00
North Sydney do	166 65	195 00		
Pictou Custom House.....	180 80	161 47		
do Marine Hospital.....		107 28		
Truro Post Office	410 80	143 04	78 40	15 00
Windsor do	400 00	220 52	96 00	75 00
Yarmouth Post Office, &c.....	416 90	200 00	439 60	60 00
<i>Prince Edward Island</i>				
Charlottetown Dom. Building..	1,721 76	415 60	1,516 02	25 50
Montague Post Office.....	74 41	68 13	2 70	
Summerside do	402 37	279 77	40 80	
<i>New Brunswick.</i>				
Bathurst Post Office, &c.....	415 97	811 53		
Carleton (St. John) P. Office, &c.....			154 50	20 00
Chatham Post Office, &c.....		123 29	73 60	
Fredericton Post Office, &c.....	402 50	353 26	300 87	33 00
Moncton do	412 70	228 35	635 69	134 00
Newcastle do	430 66	395 75	210 30	
Portland do		26 98	46 25	82 00
St. John Custom House.....	1,950 68	1,747 97	137 90	409 20
do Marine Hospital.....		413 34	286 00	16 54
do Penitentiary	450 00	48 00	7 50	
do Post Office.....	1,007 93	534 24	1,803 30	315 07
do Savings Bank.....		253 00	89 20	
St. Stephen's Post Office, &c.....	415 96	154 50	391 80	51 75
Sussex do	408 78	180 18		
Woodstock do	421 05	174 99	295 13	34 00
<i>Quebec.</i>				
Hull Post Office, &c.....	149 96	377 66	31 04	69 00
Montreal Custom House.....	870 00	1,147 67	384 15	377 15
do Drill Hall.....	703 63	493 66		
do Exam. Warehouse.....	1,110 00	1,623 19	309 75	449 95
do Inland Revenue Office.....	731 49	282 15	132 45	96 9
do Post Office.....	1,247 94	1,045 33	2,927 66	2,587 83
Carried forward.....	19,265 22	13,884 57	12,666 36	6,028 79
				51,844 94

APPENDIX No. 1—Continued.

Name of Work.	Construction.	Repairs.	Staff and Maintenance	Total.
PUBLIC BUILDINGS—Continued.				
	\$ cts	\$ cts.	\$ cts.	\$ cts.
Brought forward	969,293 22	202,690 56	137,079 86	1,309,263 64
	Salaries of Engineers &c.	Heating.	Lighting.	Water.
<i>Quebec - Concluded.</i>	\$ cts.	\$ cts	\$ cts	\$ cts.
Brought forward	19,265 22	13,884 57	12,666 36	6,028 79
51,844 94				
Montreal Post Office St. Catharine St...			6 00	6 00
do do Norte Dame St.			14 00	13 30
do do St. Lawrence St.			8 20	8 55
Quebec Citadel Buildings	48 50	206 49	105 97	360 96
do Clerk of Works Office	7 12			7 12
do Cullers' Office	495 00			495 00
do Custom House	1 65	701 02	28 87	20 00
do Exam. Warehouse	1,290 21	741 29		600 00
do Marine Hospital		1,650 00		1,650 00
do Observatory				109 75
do Post Office		503 42	637 52	2,781 60
Sherbrooke Post Office, &c.	432 57	135 10	353 75	50 00
Sorel do	410 45	262 05	79 50	500 00
St. John's do	350 00	160 00		30 00
St. Vincent de Paul Penitentiary		1,472 00		
Three Rivers Custom House	183 30	232 34		72 76
do Post Office	406 08	183 05	191 70	60 00
840 83				
<i>Ontario.</i>				
Amberst Post Office, &c.	450 65	229 19	72 01	751 85
Barrie do	403 80	262 00	246 44	25 00
Belleville do	609 20	411 50	482 88	21 00
Berlin do	412 88	147 33	193 70	
Brantford do	631 05	278 62	245 00	
Brookville do	425 52	251 50	457 80	255 00
Chatham do	859 25	70 00	268 81	
Gifton do	410 55	322 00	34 18	24 30
Cobourg Inland Revenue				
do Post Office	180 00	220 00	105 60	505 60
Cornwall do	381 66	165 40	452 50	33 75
Dundas do		31 25	33 04	
Dunnville Canal Office				813 45
Galt Post Office	403 90	258 65	150 90	125 00
Gananoque Custom House		125 00		
Guelph do	448 81	277 99	226 60	37 44
Hamilton Custom House	405 00		37 58	21 00
do Post Office, &c.	988 65	1,359 87	1,708 79	50 00
Kingston Canal Tolls Office				13 50
4,107 31				
Carried forward	30,291 02	24,551 63	18,806 70	10,765 82
84,405 17				1,309,263 64

APPENDIX No. 1—Continued.

Name of Work.	Construction.	Repairs.	Staff and Maintenance.	Total.		
	\$ cts.	\$ cts.	\$ cts.	\$ cts.		
PUBLIC BUILDINGS—Concluded.						
Brought forward	969,293 22	202,890 56	137,079 86	1,309,263 64		
EXPENDITURE ON ACCOUNT SERVICES MENTIONED—Con.						
<i>Ontario—Concluded.</i>						
Brought forward.....	30,291 02	24,561 63	18,806 70	10,755 83	84,405 17	
Kingston Custom House		485 84	80 80	74 50	641 14	
do Inland Revenue Office			59 00	35 12	94 12	
do Military College.....	1,440 00				1,440 00	
do Penitentiary						
do Post Office.....	1,503 32	340 00	312 80	45 96	2,202 08	
London Custom House	46 00	522 84	139 40	64 78	773 02	
do Post Office.....	1,000 00	600 61	427 65	26 00	2,064 26	
Orangetown Post Office	610 35	217 75	35 75		863 85	
Perth Inland Revenue Office.....	4 5 09				415 09	
Peterborough Post Office.....	296 58	228 09	29 20		553 87	
Port Hope do	414 35	149 50	171 50		735 35	
Stratford do &c.....	604 50	268 90	315 61	47 25	1,236 25	
St. Catharines do &c.....	422 47	325 80	190 85	45 60	984 12	
St Thomas do	423 75	379 35	352 60	9 60	1,165 30	
Toronto Custom House.....	500 00	432 00	118 16	90 00	1,140 16	
do Examining Warehouse.....	2,682 98	959 35	25 52	175 00	3,842 85	
do Inland Revenue Office.....	180 00	379 51	125 01	59 21	743 80	
do Post Office.....	1,307 42	758 75	2,226 05	7-9 25	5,081 47	
Windsor do &c.....	1,015 10	453 37	416 68	81 65	1,966 80	
<i>Manitoba.</i>						
Winnipeg Custom House	70 00	757 60	210 60		1,037 60	
do Dom. Lands Office.....		266 00	2 40		268 40	
do Immigrant Shed.....		31 25			31 25	
do Post Office.....	2,081 21	2,340 77	696 17	295 82	5,413 97	
<i>North-West Territories</i>						
Prince Albert Court House, &c	545 44	286 73			832 17	
Regina Court House	228 01	562 56		19 50	810 07	
do Jail and Lunatic Asylum	21 50				22 50	
do Post Office.....		273 66			273 66	
<i>British Columbia.</i>						
Nanaimo Post Office	600 00	135 00	144 11	36 00	915 11	
New Westminster Post Office.....	600 00	185 87	103 42		889 29	
Victoria Custom House.....		78 50			78 50	
do Post Office.....		217 50	800 13	30 00	1,017 63	
DOMINION BUILDINGS GENERALLY	810 00	1,730 82			2,540 82	
Totals	48,110 08	37,918 98	25,790 20	12,690 51	121,509 77	
Carried forward.....			969,293 22	202,890 56	261,569 63	1,433,773 41

APPENDIX No. 1—Continued.

Name of Wcrk.	Con- struction.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts	\$ cts	\$ cts.
Brought forward	969,293 22	202,890 56	261,689 63	1,433,773 41
HARBOURS AND BREAKWATERS.				
<i>Nova Scotia.</i>				
Annapolis River—Channel Improvement.....	*125 00			125 00
Ariseig Harbour Works.....	*541 41			541 41
do Pier.....	6,450 28			6,450 28
Avonport Wharf.....	*816 00			*816 00
Barney's River (Dredging Channel).....	*1,690 60			1,690 60
Bayfield (Pomquet, Wharf.....	*4,244 24	2,495 00		6,739 24
do Dredging, &c.....	5,907 64			5,907 64
Bay St Lawrence.....	1,330 27			1,330 27
Belliveau Cove Wharf.....	*1,120 52			1,120 52
Big Rras d'Or do.....	1,223 45			1,223 45
Big Pond.....	400 00			400 00
Blue Rock.....	2,347 78			2,347 78
Boularderie.....	1,237 77			1,237 77
Broad Cove Pier.....	*\$1,000 00			
do do..... appn.	4,075 36			
	5,075 36			5,075 36
Brulé Wharf.....	*1,045 13			1,045 13
Canada Creek Piers.....	*550 00			550 00
Cape Cove Breakwater.....	*1,304 38			1,304 38
Cherry Hill—Boat Harbour.....	*150 00			150 00
Chester Canal—Jutting Passage.....	*40 00			40 00
Cheverie Pier.....		505 05		505 05
Chipman's Brook Breakwater.....	*1,620 00			1,620 00
Church Point Wharf.....	*1,692 00			1,692 00
Clifton—(Old Barns).....	1,496 43			1,496 43
Comenville.....	3,135 56			3,135 56
Cow Bay Breakwater.....	*\$1,000 00			
do do..... appn.	5,231 37			
	7,291 37			7,291 37
Cranberry Head Breakwater.....	*1,297 15	768 74		2,065 89
Digby Pier.....				
do do..... appn.	7,467 68			
	19,099 68			19,099 68
Eagle Head Wharf.....	*1,344 67			1,344 67
Katonville do.....	120 99			120 99
Economy Breakwater.....	1,546 64			1,546 64
Fox Island or Lawrencetown.....	770 00			770 00
Grand Narrows Wharf.....	*543 00			543 00
Great Tancook Island.....	1,255 44			1,255 44
Green Cove or Port Maitland Harbour.....	*1,971 66			1,971 66
do Breakwater.....		53 65		53 65
Gros Nez do.....	*103 95			106 95
Hall's Harbour.....	*310 00			310 00
Hampton Pier.....	*1,538 10			1,538 10
Harbourville Breakwater.....	*323 00			323 00
Herring Cove.....	*955 22			955 22
Iron Wharf—Grand Narrows.....	*746 70			746 70
Kingsport (formerly "Oak Point") Pier.....	*1,738 14			1,738 14
La Have Islands (Cutting Passage).....	*600 00			600 00
do River (Clearing Channel).....	*260 00			260 00
Carried forward.....	1,054,656 05	20,613 00	261,689 63	1,522,958 68

* Amounts expended by Provincial Government between 1867 and 1879, and refunded to them by the Dominion. (O. C. No. 76,362, dated 7th April, 1887.)

APPENDIX No. 1—Continued.

Name of Work.	Con- struction.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward.....	1,054,656 05	206,713 00	261,589 63	1,522,958 68
HARBOURS AND BREAKWATERS—Con.				
<i>Nova Scotia—Continued.</i>				
Lismore.....	702 29			702 29
Little Narrows.....	75 00			75 00
Liverpool Harbour—Dredging Bar.....	*06 22			506 62
Lower Horton.....	737 31			737 31
Mabou Harbour.....	1,998 28			1,998 28
Maitland Pier.....		499 86		499 86
Margaree Harbour—Repairs to Beach.....	*274 83			274 83
Margaretville Pier.....	*\$ 694 67			
do..... appn. 3,416 93				
	4,111 60			4,111 60
Matagawatch—Boat Canal.....	*220 00			220 00
Meteghan Cove Pier.....	*1,447 33			1,447 33
do River Breakwater.....	*\$1 283 33			
do do..... appn. 2,690 63				
	3,973 96			3,973 96
Militia Point Wharf.....	*684 00			684 00
Mills Harbour.....	*1,068 20			1,068 20
Morden Breakwater.....	*80 00			60 00
Moydart Cove.....	299 78			299 78
McNair's Cove.....	3,535 57			3,535 57
Ogilvie Wharf.....	*470 00			470 00
Parrsboro' Pier.....	*1,674 80	299 93		1,974 73
Peterson or Black Rock Harbour.....	*507 27			507 27
Pickett's Pier.....	*55 00			55 00
Pictou Island Wharf.....	*\$ 400 00			
do do.....	867 67			
	1,267 67			1,267 67
Plympton Wharf.....	*100 00			100 00
Port George Harbour.....	*1,076 75			1,076 75
do Greville Wharf.....	*\$ 938 00			
do do.....	1,415 10			
	2,353 10			2,353 10
do Hood do.....	*916 11	250 00		1,166 11
do Hood Island Breakwater.....	*654 47			654 47
do Latour Canal—deepening passage.....	*658 33			658 33
do Lorne Harbour.....	*1,589 33			1,589 33
do Mouton Breakwater.....	*\$ 431 65			
do do.....	3,284 83			
	3,716 48			3,716 48
Salmon River Piers.....	*\$ 329 92			
do do.....	1,498 97			
	1,828 89			1,828 89
Saulnièreville Wharf.....	*1,926 53			1,926 53
Sheet Harbour.....	1,772 66			1,772 66
Shelburne Harbour.....	*467 00			167 00
Somerville do—removing rock.....	*51 00	769 98		820 98
South Ingonish Harbour.....	801 65			801 65
Spencer's Island Wharf.....	2,037 49			2,037 49
Carried forward.....	1,097,976 45	208,559 77	261,589 63	1,568,124 85

*Amounts expended by Provincial Government between 1867 and 1879, and refunded to them by the Dominion. (O. C. No. 76,362, dated 7th April, 1887.)

APPENDIX No. 1—Continued.

Name of Work.	Con- struction.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward.....	1,097,975 45	208,559 77	261,589 63	1,568,124 85
HARBOURS AND BREAKWATERS—Con.				
<i>Nova Scotia—Conclude i.</i>				
Tancook Island	*2,000 00	.....	.....	2,000 00
Tracadie Harbour	*1,228 69	.....	.....	1,228 69
Trout Cove or Centreville Breakwater* \$ 635 00				
do do do 1,991 75				
	2 676 75	.....	.....	2,676 75
Tusket Wedge—Removing obstructions.	*195 00	.....	.....	195 00
do Wharf.....	*500 00	.....	.....	500 00
Victoria Pier	*450 00	.....	.....	450 00
West Arichat Breakwater.....	*2,000 00	.....	.....	2,000 00
Western Head	2,544 03	.....	.....	2,544 03
White Point Breakwater.....	*1,643 55	.....	.....	1,643 55
White Tavern Canal—opening passage.....	*836 42	.....	.....	836 42
Willow Cove.....	1,796 97	.....	.....	1,796 97
Yarmouth Harbour.....	*1,311 95	.....	.....	1,311 95
<i>Prince Edward Island.</i>				
Belfast Pier .....	.....	285 54	.....	285 54
Cascumpac Pier	3 837 25	.....	.....	3,837 25
Hickey's Pier .....	.....	388 99	.....	388 99
Malpeque .....	.....	248 24	.....	248 24
Murray Harbour .....	.....	548 62	.....	548 62
Nine Mile Creek .....	.....	200 55	.....	200 55
New London Harbour.....	320 00	248 25	.....	568 25
North Cardigan.....	.....	21 21	.....	21 21
Pinette	265 96	.....	.....	265 96
Souris, Knight's Point.....	6,605 18	.....	.....	6,605 18
Vernon River Pier.....	698 99	.....	.....	698 99
Victoria Pier.....	.....	38 77	.....	38 77
<i>New Brunswick.</i>				
Anderson's Hollow Breakwater, Rocher Bay.....	2,119 05	.....	.....	2,119 05
Basie Verte Ballast Pier.....	4,981 84	.....	.....	4,981 84
Belliveau Village.....	45 57	.....	.....	45 57
Cape Tormentine Breakwater.....	4,744 43	.....	.....	4,744 43
Clifton	748 75	.....	.....	748 75
Oceaigne Wharf.....	984 98	.....	.....	984 98
Dalhousie Ballast Wharf.....	7,882 50	.....	.....	7,882 50
Grande Anse.....	559 62	.....	.....	559 62
Richibucto Harbour	2,956 16	.....	.....	2,956 16
St. John do (Negro Point Breakwater) ..	89 73	.....	.....	89 73
do do (Partridge Island).....	880 53	.....	.....	880 53
St. John River—removal of snags.....	.....	.....	250 00	250 00
do —River des Chutes to				
do Bear Island	\$ 917 24	.....	.....	917 24
do —Bear Island and Fred- ericton	600 00	.....	.....	600 00
Carried forward.....	\$1,517 24	1,152,919 33	210,539 94	261,839 63
				1,625,298 90

* Amounts expended by Provincial Government between 1867 and 1879, and refunded to them by the Dominion. (O. U. No. 76,362, dated 7th April, 1887.)

APPENDIX No. 1—Continued.

Name of Work.	Con- struction.	Repairs.	Staff and Maintenance	Total.	
	\$ cts	\$ cts.	\$ cts	\$ cts.	
Brought forward	\$1,517 24	1,152,9.9 33	210,539 94	261,839 63	1,625,298 90
HARBOURS AND BREAKWATERS—Con.					
<i>New Brunswick—Concluded.</i>					
St. John River—Fredericton and Wood- stock.....	415 87				
do —Above Grand Falls....	2,725 35				
Upper Salmon River.....	4,658 46				4,658 46
Wilson's Beach.....	2,855 00				2,855 00
	500 00				500 00
HARBOURS GENERALLY, Maritime Provinces.....			10,517 07		10,517 07
<i>Quebec.</i>					
Bagogville (St. Alphonse) Pier.....	216 98				216 98
Baie des Pères Pier, Upper Ottawa River.....	3,000 00				3,000 00
Baie St. Paul Pier.....		35 66			35 66
Beauport Pier.....	51 75				51 75
Belœil Pier and Booms.....			82 00		82 00
Berthier (<i>en haut</i>).....	99 97				99 97
Cap de la Magdeleine.....	3,000 00				3,000 00
Carleton Pier.....	399 84				399 84
Cascades Pier.....	403 41				403 41
Chenal du Moine Ice Piers, at St. Anne de Sorel..	917 67				917 67
Coteau du Lac Pier.....	3,025 30				3,025 30
Flint's Wharf, Lake Mégantic.....		323 78			323 78
Harbours, &c., Generally.....			10,636 72		10,636 72
Ile aux Coudres Pier.....		249 94			249 94
Ile aux Gélonds' Breakwater—Etang du Nord....	6,642 40				6,642 40
Ile Perrot Pier.....	4,880 75				4,880 75
Ile Verte do.....	3,606 30				3,606 30
Kamouraska Pier.....	318 44				318 44
Laprairie Harbour.....	4,989 75				4,989 75
Les Ebonlements Pier.....		189 24			189 24
L'Islet Pier.....		215 91			215 91
Long Saut Pier.....	800 00				800 00
Longueuil do.....	10,322 42				10,322 42
Malbaie do.....		28 18			28 18
New Carlisle do.....	1,405 06				1,405 06
Percé do.....	2,112 21				2,112 21
Piers below Quebec.....			641 21		641 21
Piopolis Wharf, Lake Mégantic.....		77 00			77 00
Port Daniel Pier.....	17,486 58				17,486 58
Quebec Harbour.....			80 55		80 55
do Queen's Wharf.....		632 63			632 63
Rivière du Lièvre.....	45,329 04				45,329 04
do du Loup (<i>en bas</i>) Pier.....	640 56	234 88			874 94
do Madawaska.....	783 65				783 65
do Nicolet, Harbour of Refuge.....	19,058 83				19,058 83
do Ouelle Pier.....		935 00			935 00
do Richelieu.....			60 00		60 00
do do —Ile Piers at Sorel.....	9,271 68				9,271 68
do Saguenay, Grande Décharge Lake St. John.....	118 78				118 78
do St. Anne de Beaupré.....	1,187 13				1,187 13
do St. François.....	2,795 69				2,795 69
Carried forward.....	1,303,829 98	213,461 66	283,856 98		1,801,148 62

APPENDIX No. 1—Continued.

Name of Work.	Con- struction.	Re pairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward	1,303,829 98	213,461 66	283,856 98	1,801,148 62
HARBOURS AND BREAKWATERS—Con.				
<i>Quebec—Concluded.</i>				
Rivière St. Lawrence			228 25	228 25
do do Breaking ice between Sorel and Three Rivers			4,983 96	4,983 96
Rivière St. Lawrence, removal of chains and anchors	915 90			915 90
Rivière St. Lawrence, water levels			4,128 72	4,128 72
do St. Louis, deepening feeder	2,111 36			2,111 36
do Yamaska	3,664 42		507 97	4,172 39
St. Adelaide de Pabos (Little Pabos)	18 13			18 13
St. Anne du Saguenay Pier	2,100 00			2,100 00
St. François Pier (Ile d'Orleans)	245 75			245 75
St. Irénée Pier	2,799 01			2,799 01
St. Laurent Pier (Ile d'Orléans)	413 24			413 24
St. Michel Pier		821 02		821 02
Tadoussac Pier (Anse à l'Eau)		48 51		48 51
Three Rivers, Windmill Point, Ice Pier	1,650 52			1,650 52
Trois Pistoles Pier	363 20			363 20
Vaudreuil Wharf (Government grant)	2,400 00			2,400 00
<i>Ontario.</i>				
Bayfield Harbour	13 82			13 82
Becheville do	7,351 04			7,351 04
Burlington Bay Channel		128 25	595 13	723 38
Chantry Island Breakwater	115 15			115 15
Cobourg Harbour	434 97			434 97
Collingwood Harbour	5,003 80			5,003 80
Goderich Harbour	1,699 54			1,699 54
Hurons Generally			10,858 43	10,858 43
Hilton or Marksdale, Lake Huron	6,996 31			6,996 31
Kaministiquia River	23,410 47			23,410 47
Kincairdine Harbour	4,951 79			4,951 79
Kingston do	5,148 25			5,148 25
Kingsville do	2,394 26			2,394 26
Lake of the Woods (Government grant) dam across outlets	7,000 00			7,000 00
Little Current, Lake Huron	7,183 93			7,183 93
Little Nation River	3,010 14			3,010 14
Mattawan Pier	1,200 00			1,200 00
Midland Harbour	23,455 07			23,455 07
McGregor's Creek	4,548 08			4,548 08
Oakville Harbour	9,843 35			9,843 35
Owen Sound Harbour	1,032 50			1,032 50
Parry Sound do	200 00			200 00
Port Albert do	2,087 93			2,087 93
do Arthur Breakwater	56,509 51			56,509 51
do Arthur—Dredging	3,473 80			3,473 80
do Elgin Harbour	10,337 13			10,337 13
do Hope do	2,362 72			2,362 72
Portsmouth do	5,220 22			5,220 22
River Ottawa—Narrows above Pembroke	3,480 65			3,480 65
Rivière des Pêches	1,505 00			1,505 00
Rondeau Harbour	893 68			893 68
Carried forward	1,521,374 62	214,459 44	305,159 44	2,040,993 50

APPENDIX No. 1—Continued.

Name of Work.	Con- struction.		Repairs.		Staff and Maintenance		Total.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Brought forward.	1,521,374	62	214,459	44	305,159	44	2,040,993	50
HARBOURS AND BREAKWATERS—Concluded								
<i>Ontario—Concluded.</i>								
Saugeen River Pier	3,419	00					3,419	00
Sault Ste. Marie	316	79					316	79
Sheguiandah, Grand Manitoulin	311	66					311	66
Southampton Harbour	1,477	50					1,477	50
Thornbury do (dredging)	2,497	75					2,497	75
Tolsma Bay, Cockburn Island	209	01					209	01
Toronto Harbour	19,880	94					19,880	94
<i>Manitoba.</i>								
Harbours Generally					3,637	83	3,637	83
<i>North-West Territories.</i>								
North Saskatchewan River	11,282	37					11,282	37
<i>British Columbia.</i>								
Cowichan River	1,490	94					1,490	94
Esquimalt Graving Dock	90,727	48			6,342	63	97,070	11
Fraser River	9,997	92					9,997	92
Nanaimo Harbour—Removal of Nicol Rock	9,996	40					9,996	40
River Nicomeckel—Removal of snags	999	49					999	49
do Serpentine	942	75					942	75
do Somass	497	50					497	50
Victoria Harbour—"Dredger Rock."	5,993	00					5,993	00
HARBOURS AND RIVERS GENERALLY					8,458	14	8,458	14
DREDGES	14,139	59	32,421	46			46,561	05
DREDGING.								
<i>Nova Scotia.</i>								
Cheticamp	\$6,491	73						
Middle River, Pictou	1,082	19						
Pictou Harbour—								
Railway wharf, \$ 351 71 }	2,264	31						
Market do 2,272 60 }								
Port Hood	432	87						
Wallace	2,809	40						
Yarmouth Harbour	5,584	33						
	\$19,024 83							
<i>Prince Edward Island.</i>								
Tignish Harbour	4,388	20						
Carried forward.....	\$23,413	03	1,695,554	71	246,880	90	323,598	04
							2,266,033	65

APPENDIX No. 1—Continued.

Name of Work.	Con- struction.		Repairs.		Staff and Maintenance		Total.			
	\$	cts.	\$	cts.	\$	cts.	\$	cts.		
Brought forward.....	\$23,413	04	1,695,554	71	246,880	90	323,598	04	2,266,033	65
DREDGING—Concluded.										
<i>New Brunswick.</i>										
Belle Ile Point.....	\$2,083	07								
Grand Lake.....	3,001	65								
Richibucto.....	1,447	35								
			6,532	07						
GENERALLY MARITIME PROVINCES.....		32	15							
Total, Maritime Provinces.....	\$29,977	25								
<i>Quebec.</i>										
Chateauguay River.....	\$3,214	78								
Gatineau do.....	1,645	22								
Laprairie Harbour.....	\$1,990	00								
Papineauville Harbour....	197	46								
Rivière du Loup (<i>en bas</i>)...	518	50								
do (<i>en haut</i>).....	3,876	50								
River Richelieu.....	2,559	77								
do St. Francis.....	4,113	55								
do St. Maurice.....	1,000	00								
do Ste. Anne de la Pérade.....	635	00								
Valleyfield Harbour.....	615	30								
Generally.....	971	10								
			\$21,335	18						
<i>Ontario.</i>										
Cobourg Harbour.....	\$ 661	00								
Goderich do.....	2,523	28								
Kincardine do.....	1,093	36								
Oakville do.....	4,147	50								
Port Elgin do.....	50	00								
Port Hope do.....	1,574	28								
Saugeen River.....	240	00								
South Nation River.....	670	44								
Generally.....	1,696	02								
			12,659	88						
<i>Manitoba.</i>										
Red River.....	\$1,320	00								
White Mud River.....	1,841	17								
Generally.....	6,249	67								
			12,410	84						
<i>British Columbia.</i>										
Fraser River.....	\$4,515	77								
Esquimalt Harbour.....	1,831	63								
Victoria do.....	8,646	81								
			14,994	21						
			91,377	36					91,377	36
DREDGING—GENERAL SERVICE.....							2,160	74	2,160	74
Carried forward.....	1,786,932	07	246,880	90	325,748	78	2,359,561	75		

APPENDIX No. 1—Continued.

Name of Work.	Con- struction.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward.....	1,786,932 07	246,880 90	325,748 78	2,359,561 75
SLIDES AND BOOMS.				
Saguenay District slides	2,409 96	742 75	1,475 82	4,628 53
St. Maurice do		18,242 52	16,943 92	35,186 44
Ottawa do			20,374 54	20,374 54
Ottawa River slides.....	2,659 13	6,814 73		9,473 86
Gatineau do	400 00	2,618 24		3,018 24
Madawaska do	4,061 33	2,356 95		6,418 28
Coulouge do	827 38	210 60		1,037 98
Black do	734 88	310 71		1,045 59
Petewawa do		3,409 34		3,409 34
Rivière du Loup (<i>en haut</i>)—Improvements at Grande Chute	4,130 75			4,130 75
Newcastle District Works.....	1,345 50	2,707 92	2,035 61	6,089 03
ROADS AND BRIDGES.				
Dunnville Bridge, Grand River.....		353 73		353 73
Portage du Fort Bridge.....	2,301 28			2,301 28
Hamilton and Port Dover Road.....			243 20	243 20
Temiscouata Road.....		821 15		821 15
Des Joachims Bridge.....	774 08			774 08
Ottawa, Roadway to Dynamo House	9,409 36			9,409 36
do Cartier Square.....	860 57			860 57
do Chaudière Bridge.....		499 62		499 62
do Dufferin-Sappers Bridge.....		504 55		504 55
do Nepean Point			6 00	6 00
do St. Patrick Street.....			25 60	25 60
do Union Suspension Bridge.....		1,352 70		1,352 70
do Wellington Street.....	4,687 46			4,687 46
Red River Route.....			3 90	3 90
Battleford Bridge, Battle River, N.W.T.....	97 56			97 56
Bow River do near Calgary, do	21,568 19			21,568 19
Elbow do do do	1,000 00			1,000 00
Moose Jaw Creek Bridge.....	300 00			300 00
TELEGRAPH LINES.				
<i>Nova Scotia.</i>				
Cape Sable.....	\$ 274 51			
Cheticamp.....	642 74			
Low Point.....	50 00			
Meat Cove.....	1,864 94			
	\$ 2,832 19	3,136 10		3,136 10
<i>Prince Edward Island.</i>				
Between Island and Mainland (subsidy).....			1,946 66	1,946 66
<i>New Brunswick.</i>				
Bay of Fundy.....	\$1,187 20			
Escuminac.....	427 20			
	\$ 1,614 40			
Carried forward.....	\$ 4,446 59	1,847,635 60	287,826 41	368,804 03
				2,504,266 04

APPENDIX No. 1.—Continued.

Name of Work.	Con- struction.	Repairs.	Staff and Maintenance	Total.
	\$ cts.	cts.	\$ cts.	\$ cts.
Brought forward. ... \$ 4,446 59	1,847,635 60	287,826 41	368,804 03	2,504,266 04
TELEGRAPH LINES—Concluded.				
<i>Newfoundland.</i>				
Anglo-American Co., subsidy Cape Ray line..... \$ 250 00				
<i>Quebec.</i>				
North Shore St. Lawrence, Quebec to Grosse Ile..... \$ 719 09				
North Shore St. Lawrence, toward Pointe aux Esqui- maux..... 6,582 42	4,616 24			4,616 24
Magdalen Islands..... 2,503 00				
Anticosti Island.. .. 2,218 00				
..... \$ 12,022 51				
LOWER ST. LAWRENCE AND MARITIME PROVINCES GENERALLY..... 5,817 86			22,536 96	22,536 96
<i>Ontario.</i>				
Bath and Amherst.....			29 24	29 24
Warton to Tobermory.....	5,600 00			5,600 00
<i>North-West Territory.</i>				
Battleford to Edmonton via Fort Pitt.....	15,608 74			15,608 74
Battleford to Humbolt.....	12,759 54			12,759 54
Humbolt to Qu'Appelle.....	5,525 20			5,525 20
Clark's Crossing to Prince Albert, Stobart and Batoche.....	6 50			6 50
Telegraph lines generally.....			23,264 93	23,264 93
<i>British Columbia.</i>				
Australian Rancho to Barkerville.....	833 29			833 29
Telegraph lines generally.....			100 00	100 00
TELEGRAPH SERVICE GENERALLY.....			10,064 65	10,064 65
BEACONS AND BUOYS.				
Joggins River—Placing Buoys.. .. \$ 62 00				
Jordan Harbor—Beacon on Reef..... 300 00				
Lockport—Placing Buoys..... 261 97				
Victoria Bridge— do 127 09				
.....			*751 06	*751 06
Carried forward.....	1,892,585 11	287,826 41	425,550 87	2,605,962 39

*Amount expended by Provincial Government of Nova Scotia between 1867 and 1879, and re-
funded to them by the Dominion. (O. C. No. 76,362, dated 7th April, 1887).

APPENDIX No. 1—*Concluded*

Name of Work.	Con- struction.	Repairs.	Staff and Maintenance	Totals.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward.....	1,892,585 11	287,826 41	425,550 87	2,605,962 39
MISCELLANEOUS.				
Surveys and Inspections			25,556 90	25,556 90
Arbitrations and Awards	\$3,329 78			
do do Widow F. H. Ennis, award and costs.....	6,515 38			
Agent and Contingencies, B. Columbia.....			9,845 16	9,845 16
Sundries :—			4,438 92	4,438 92
S. McLaughlin—Annual Allowance as Photographer	\$ 400 00			
Widow Thos. Lambkin—Gratuity..	90 00			
E. V. Bodwell—Services as Ac- countant, Victoria, B. C.....	2,200 00			
J. W. McKeen—Telegraph Opera- tor, N. W. T.—Loss of time and health during Rebellion	130 00			
Michael Welsh—Gratuity 2 months' salary of his late son, James Walsh	180 00			
Extra Clerks—Preparing Returns for Parliament.....	458 80		3,428 80	3,428 80
Totals.....	1,892,585 11	287,826 41	468,820 65	2,649,232 17
WORKS AUTHORIZED BY SPECIAL ACTS OF PARLIAMENT.				
River St. Lawrence—Deepening between Quebec and Montreal.....	195,000 00			195,000 00
Quebec Harbour Improvement	418,710 83			418,710 83
Levis Graving Dock	166,000 00			166,000 00
Totals.....	779,710 83			779,710 83
Grand Totals.....	2,672,295 94	287,826 41	468,820 65	3,428,943 00

O. DIONNE,
Accountant.

PUBLIC WORKS DEPARTMENT,
OTTAWA, 20th November, 1888.

APPENDIX No. 2.

REPORT

ON

PUBLIC BUILDINGS

THROUGHOUT THE DOMINION,

FOR THE FISCAL YEAR ENDED 30th June, 1888.

BY

THOS. FULLER, CHIEF ARCHITECT.

 APPENDIX No. 2.

 REPORT OF THE CHIEF ARCHITECT.

Ref. No. 92,334.

 CHIEF ARCHITECT'S OFFICE,
 OTTAWA, 22nd October, 1888.

SIR,—I have the honor to transmit herewith the annual report on public buildings and works under my charge, for the fiscal year ended 30th June, 1888.

I have the honor to be, Sir,

Your obedient servant,

THOMAS FULLER,
Chief Architect.

A. GOBEIL, Esq.,
 Secretary Department Public Works, Ottawa.

 PROVINCE OF PRINCE EDWARD ISLAND.

CHARLOTTETOWN.

 DOMINION BUILDING.

Sundry repairs to furniture and windows were effected; and the grounds were graded.

MONTAGUE.

POST OFFICE.

The fencing has been completed, but only a portion of the grading and foot-paths has been done, as the work was abandoned by the contractor before completion.

Plans, &c, prepared by this Department.

Superintending Architects, Messrs. Stirling & Harris.

Contractor, Mr. L. A. Wilmot.

 PROVINCE OF NOVA SCOTIA.

AMHERST.

PUBLIC BUILDING.

The property was fenced; storm sashes for the windows were supplied; and minor repairs made under the supervision of this Department.

Clerk of works, Mr. Jno. E. Turnbull.

BADDECK.

POST OFFICE, &c., BUILDING.

A wooden out-house to be used as a coal store was erected; a quantity of grading was carried out; the drain covered; and some fittings and a flagstaff supplied.

[1888]

HALIFAX.

EXAMINING WAREHOUSE.

The felt and gravel roof covering, sky lights, parapets and flashings were renewed, and some general repairs, &c., made to building.
Clerk of works, Mr. Jno. E. Turnbull.

IMMIGRATION OFFICE.

Some necessary repairs have been executed, and a few articles of office furniture supplied.

QUARANTINE STATION, LAWLOR ISLAND.

The woodwork of the various buildings was thoroughly repaired and painted; a new kitchen was built; new drains were put in; cellars were floored; and the Surgeon's Office was fitted up and furnished.
Clerk of works, Mr. Jno. E. Turnbull.
Contractor, Mr. Samuel Brookfield.

NEW GLASGOW.

PUBLIC BUILDING.

The tubes of the hot water boiler had to be renewed owing to corrosion from the local water; a safe was supplied to the Custom House; and some minor repairs effected.

NORTH SYDNEY.

PUBLIC BUILDING.

The building which was described in a previous report was completed, fitted up, furnished and occupied.

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

Clerk of Works, Mr. Chas. P. Moffat.

Contractors for construction of building and for office fittings, Messrs. Macdonald, Treen & Henderson.

Contractors for furniture, Messrs. W. H. Moore & Co.

Contractors for heating apparatus, The Truro Manufacturing Co.

PICTOU.

CUSTOM HOUSE.

On 18th October last a contract was entered into with Mr. C. B. Thompson, of New Glasgow, for the construction of a hot water heating apparatus, which has been fitted up and completed.

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

Clerk of Works, Mr. W. J. Lorrain.

MARINE HOSPITAL.

A contract was entered into with Messrs. Muirhead & Co., of Halifax, on the 11th October last, for the construction of a hot water heating apparatus, which has been fitted up and completed.

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

Clerk of Works, Mr. W. J. Lorrain.

WINDSOR.

POST OFFICE BUILDING.

The drains were repaired, cleaned and put in order; storm sashes were supplied to all windows on ground and first floors; some additions to the heating apparatus
[1888]

were made ; some additional office fittings were supplied, and sundry general repairs made ; all executed under the supervision of this Department.
Clerk of Works, Mr. Jno. E. Turnbull.

YARMOUTH.

PUBLIC BUILDING.

Fittings, furniture and carpets for the various offices were supplied, and asphalt sidewalks were laid down along the street fronts of the building.

Plans, &c., prepared by this Department.

Clerk of Works, Mr. J. B. Kinney.

Contractor for furniture, Mr. J. R. Wyman.

Contractor for sidewalks, Mr. Jas. Sykes.

PROVINCE OF NEW BRUNSWICK.

BATHURST.

POST OFFICE &C., BUILDING.

Building fitted up, furnished and occupied. During the fiscal year the property was fenced on two sides ; sidewalks put down on the street fronts, and the yard, &c., graded.

Clerk of Works, Mr. Henry White.

CARLETON.

POST OFFICE.

Roof covering, eave troughs and down-pipes were repaired, and a contract was entered into with D. W. Clark & Son for supplying the building with electric light. Works carried out under the supervision of Mr. W. J. McCordock.

CHATHAM.

POST OFFICE, &C., BUILDING.

The front and sides of roof of wing were re-slatted and the roof generally repaired.

Clerk of Works, Mr. Jno. E. Turnbull.

CHATHAM (MIDDLE ISLAND).

QUARANTINE.

Repairs were made to the caretaker's house ; chimneys, porches and privies built for the hospitals ; various general repairs were made ; one of the hospitals was raised out of reach of spring floods, and raised pathways made between the dwellings and hospitals.

Clerk of Works, Mr. Jno. E. Turnbull.

DALHOUSIE.

POST OFFICE, &C., BUILDING.

A site, being part of lot 45 having a frontage of 98 feet on William street by 80 feet in depth, was acquired ; plans, &c., were prepared, tenders invited, and the contract for the construction of the building awarded.

The building is to be of stone, with wooden roof, floors and partitions, and metal roof covering. There is to be a two and a-half story main building, 38 feet by 29 feet ; the ground floor for the Post Office ; the first floor for the Customs ; the attic for the caretaker's apartments ; and the basement for the furnace, fuel, &c. In the rear is to be a one-story Examining Warehouse, 28 feet by 15 feet, with a one-story W. C. adjoining.

Plans, &c., prepared and work to be superintended by this Department.

Clerk of Works, Mr. J. C. Barberie.

DORCHESTER.

MARITIME PENITENTIARY.

During the year 117 ordinary cell doors were made, 81 of which were hung, and 81 locks made and fitted in places, exclusive of 8 doors made and placed for the 4 hospital cells. Parts of various machines were renewed and repaired at the machine shop.

The tank houses were repaired and painted.

Repairs were made to prison porches, coal shoots and shutters of boiler house, plastering of prison building as well as a large quantity of general jobbing.

Plans prepared and work executed under the supervision of this Department.

Resident Clerk of Works, Mr. John E. Turnbull.

FREDERICTON.

Asphalt sidewalks with chain stones were laid down. The Post Office and Custom House were supplied with gas fittings. The Weights and Measures Office was fitted up; a flag pole was fitted up, and some general repairs effected.

Superintendent, Mr. G. E. Fairweather, Architect.

Clerk of Works, Mr. F. S. Hilyard.

KINGSTON (KENT).

RICHIBUCTO MARINE HOSPITAL.

Some further renewals and repairs, in addition to those mentioned in my report of last year, were done to the Hospital buildings under the supervision of Mr. E. Hutcheson.

MONCTON.

POST OFFICE.

Alterations were made in the public lobby porch and doors, and some repairs executed.

Clerk of Works, Mr. John E. Turnbull.

NEWCASTLE.

PUBLIC BUILDING.

A tube well with necessary piping, fittings, &c., was put in to provide a water supply for the building; an asphalt sidewalk was put down on the streets where they adjoin the building; the yard was paved with cedar blocks; storm sashes were provided for all windows, and sundry repairs and painting executed.

Works executed under the superintendence of this Department.

Clerk of Works, Mr. John E. Turnbull.

PORTLAND.

POST OFFICE.

Some general repairs to the building were executed under the supervision of Mr. W. J. McCordock.

ST. JOHN.

CUSTOM HOUSE.

The roof covering over south wing and the middle of west wing was renewed.

The exterior iron work of the building was repainted.

The Customs offices with the halls and corridors, and also the offices of the Immigration Agent, were cleaned, the walls and ceilings calsomined and painted, woodwork grained and varnished, and the hardwood shellacked and varnished.

Changes were made in the basement to allow of the teams to drive into the coal vaults from Water street instead of depositing the coal on Prince William street and running it down through shoots, necessitating handling several times.

Work executed under the supervision of Mr. W. J. McCordock.

MARINE HOSPITAL.

Temporary repairs were made to the roof; and a small extension of the heating apparatus, under the supervision of Mr. W. J. McCordock.

POST OFFICE.

An office for postal matter "in Bond" was fitted up and furnished on the Mezzanine below the ground floor; iron gratings were placed over the windows of lower and upper basements, and an iron handrail placed outside the building.

Works carried out under the supervision of Mr. W. J. McCordock.

SAVINGS BANK.

Cleaning, repairs and painting were done to the ceilings, walls, woodwork and ironwork throughout the building; and the heating and the roof covering were repaired.

Executed under the supervision of Mr. W. J. McCordock.

ST. STEPHEN.

PUBLIC BUILDING.

A safe, and the furniture and carpets for the Post Office and Custom House were supplied, and the plumbing and gas fixtures were put in.

Clerk of Works, Mr. D. F. Maxwell.

WOODSTOCK.

POST OFFICE, CUSTOM HOUSE, &C.

During the fiscal year 1887-8, some carpets were supplied, and minor repairs executed.

PROVINCE OF QUEBEC.

AYLMER.

POST OFFICE.

Cadastral Lot 759, south side of Main street, was acquired for a site, and a contract for the construction of the building was entered into on 28th May last.

The building is to be 2½ stories, 39 feet by 29 feet, of brick walls with stone dressings and foundations, and wooden floors, partitions and roof; in the rear is to be a wooden annex, 24 feet by 20 feet.

Plans, specifications, &c., prepared and the works being carried out under the supervision of this Department.

Clerk of Works, Mr. F. Symmes.

Contractor, Mr. D. B. McDonald.

CHICOUTIMI.

MARINE HOSPITAL.

The interior of the covered way was finished and sundry repairs to the building generally were effected.

COATICOOK.

PUBLIC BUILDING.

During the previous year a site was secured on the corner of Maria and Cutting streets, and on the 23rd January last a contract was entered into for the construction of this building to accommodate the Post Office, Customs and Inland Revenue Offices. The building will consist of a 2½ story main building, 41 feet by 56 feet, and a one story annex 42 feet 6 inches by 20 feet. The walls are to be of brick with stone dressings and on stone foundations, the roofs, floors and partitions of wood and the roof covering of galvanized iron. The basement of the main building is to be for heating furnace and fuel; the ground floor of the main building for the Post Office, and of the annex for Examining Warehouse and Weights and Measures; the first floor is to be the Customs and Inland Revenue Offices; and the attic for the caretaker's apartments. There are to be 3 brick vaults, one on the ground and two on the first floor.

Plans and specifications prepared and work supervised by this Department.

Clerk of Works, Mr. Wright Sleeper.

Contractor, Mr. F. F. Shurtliff.

GROSSE ISLE.

QUARANTINE STATION.

Under contract with Mr. Geo. Beaucage general repairs were made to the Quarantine building; and the plastering of the brick hospital, destroyed by frost, was renewed.

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

HULL.

POST OFFICE.

This building was completed, fitted up, furnished and provided with a hot water heating apparatus.

Plans, &c., prepared and works superintended by this Department.

Clerk of Works, Mr. D. C. Simon.

Contractor for construction of building and fittings, Mr. Wm. Stuart.

Contractors for heating apparatus, Messrs. Garth & Co.

JOLIETTE.

POST OFFICE, &c. BUILDING.

On the 6th October last, a site on Notre Dame street, being south western ¼ of lot No. 304 and having a frontage of 92 feet by a depth of about 180 feet, was purchased; a contract for the construction of the building was entered into on 20th April, and the works are now in progress.

The building will consist of a 2½ story main building 34 feet by 50 feet, of brick with stone dressings and foundations, to be occupied as a Post Office and Inland Revenue Offices, and a one story brick annex 17 feet by 31 feet for an Examining Warehouse. The floors, partitions and roofs are to be of wood; the roof covering of galvanized iron.

Plans, &c., prepared and work carried out under the supervision of this Department.

Clerk of Works, Mr. A. Durand.

Contractor, Mr. Geo. Beaucage.

MARIA.

INDIAN MISSION.

Sundry repairs were effected to the Roman Catholic Chapel under the supervision of the Rev. J. Gagné.

MONTREAL.

ARMORIES.

The fittings for the various armories and the furnishings for the offices are being supplied.

Plans, &c., prepared, and work superintended by Mr. A. Raza, Architect.

Clerk of Works, Mr. Geo. Bowie.

Contractor for fittings, Messrs. J. B. St. Louis Bros.

CUSTOM HOUSE.

Extensive changes were made in long room fittings, due to a change in mode of collecting Customs revenue, and an unfinished room was fitted up as a record room.

Resident Architect, Mr. Jas. Nelson.

EXAMINING WAREHOUSE.

Sundry repairs to roof were effected.

Resident Architect, Mr. Jas. Nelson.

POST OFFICE.

The Money Order and Registered Offices were enlarged and altered, and new fittings and furniture provided; an office at the foot of the main stairs was fitted up and furnished for the use of the Customs postal matter; a gallery for clothes presses was erected in the ground floor story; a fire and burglar proof safe was supplied the Postmaster's office; some additions were made to heating and plumbing, and some general repairs effected to woodwork.

Resident Architect, Mr. Jas. Nelson.

Clerk of Works, Mr. Geo. Bowie.

QUEBEC.

CITADEL BUILDINGS.

The usual and ordinary repairs, alterations, furnishing, &c., at His Excellency's quarters were carried out under the supervision of this Department.

CITADEL CLIFF.

A further quantity of shale, liable to endanger life and damage property, was removed.

CUSTOM HOUSE.

Extensive repairs were effected in the basement floor; the plumbing was in great part renewed, and a new well put in under the supervision of this Department.

Local Architect, Mr. J. F. Peachy.

QUEEN'S WHARF BUILDINGS.

General repairs were effected to Forge and Queen's Stores.

Local Architect, Mr. J. F. Peachy.

Contractor, Mr. Ferd. Poitras.

DRILL HALL.

Building completed.

Plans, &c., prepared and work superintended by Mr. E. E. Taché, Architect, Quebec, P. Q.

Clerk of Works, Mr. W. J. Peters.

OBSERVATORY.

Repairs to roof of Observatory and some general repairs to residence were effected.

IMMIGRANT BUILDING.

This building, which was described in last year's report, was completed and handed over to the Department of Agriculture on 28th June, 1888.

Plans, specifications, &c., prepared by this Department.

Local Architect, Mr. J. F. Peachy.

Clerk of Works, Mr. Jos. Garneau.

Contractor, Mr. Alf. Lortie.

POST OFFICE.

The roof, chimney tops and water closets were repaired, and the drainage put in working order.

STE. ANNE DE RESTIGOUCHE.

INDIAN MISSION.

Sundry repairs were executed to the mission buildings under the supervision of Rev. Monsignor Guay.

ST. JEROME.

PUBLIC BUILDING.

On 27th January a contract was entered into for the construction of this building on Cadastral Lot No. 219, on Main street. The walls are to be brick with stone dressings and stone foundations, and the floors, partitions and roof of wood. There is to be a main building 30 feet by 56 feet, two stories, basement and attic, with a two story porch in front 18 feet by 8 feet, and a one story annex in the rear 33 feet by 21 feet. There are to be brick vaults, two on the ground floor and one on first floor.

The ground floor of the main building is to be occupied by the Post Office and the Custom House, and the annex by the Examining Warehouse and Weights and Measures offices; the first floor by caretaker and offices; the attic to remain unfinished for the present.

Plans and specifications prepared and work supervised by this Department.

Clerk of Works, Mr. J. Matte.

Contractor, Mr. Joseph Fitzpatrick.

ST. VINCENT DE PAUL.

PENITENTIARY.

The following works were carried out principally by convict labor:—

Boiler House and Engine Room.—A cut stone boiler house 40 feet by 40 feet and 23 feet high, with ceiling of rolled girders and brick arches, was erected and completed by convict labor.

Steam Heating.—The steam piping and boiler for the dormitories and keeper's hall were completed; the boilers having been supplied by contract and the remaining work by convict labor.

Hot water Heating.—The residences of the Warden and the Deputy Warden have been furnished with hot water heating apparatus by contract.

Warden's Residence.—This building was renovated inside and outside, papered inside, and a 9 inch drain pipe, 33 yards in length, carried from the house to the river.

Deputy Warden's Residence.—All rooms were re-papered and all woodwork painted three coats.

Ice House.—A strongly framed one story wooden building on a stone foundation 36 feet by 24 feet, clapboarded externally and sheathed with 1 inch boards inside, the roof covered with galvanized iron, has been erected in the prison yard.

Bridge to Quarry.—The entire superstructure, 500 feet in length, was renewed, and 2,000 new ties laid on tramway.

Keeper's Hall.—Basement and ground floor have been laid in dressed stone flagging; the basement has been divided by a brick partition, 2 feet thick, 60 feet long, and 12 feet high; in the hall proper, two galleries have been carried around the inside of the hall, floored with oak, resting on cantilevers, and reached by four flights of iron staircases; and the ceiling of the hall has been lathed, plastered and covered with 1 inch matched battens, oiled and varnished.

Lumber Shed.—A wooden building, 130 feet by 20 feet and 12 feet high, was erected for storage of sawn lumber.

Baker's Oven.—A large oven was built.

Kitchen and Laundry.—Through a change in regulation the dining room was done away with, and the space thus gained was added to the kitchen and laundry, and floored with dressed flagging laid in Portland cement.

The East Dormitory Cells were taken down and the space fitted up as a steam drying closet for the laundry. The kitchen was supplied by contract with five steam jacket copper kettles connected with one of the steam boilers.

Workshops.—The tailor, tinsmiths' and shoemaker shops were fitted up with benches, platforms, &c., and four additional windows were put in.

Boiler House Smoke Stack.—A smoke stack, 6 feet 10 inches in diameter, was constructed; carried up 60 feet above roof.

New Cut Stone Steps were built to the three entrances of workshop, and to the entrance of the Catholic chapel.

Five of the workshops' windows were grated.

750 bushels of lime were burned.

7 978 feet of dressed flagging and 10,629 feet of ashlar were prepared for the west dormitory.

In addition to the above a large quantity of general repairs, such as painting, woodwork and roofs, and pointing walls, were done to the various buildings.

Plans, &c., prepared by this Department.

Superintending Architect, Mr. John Bowes.

Contractor for heating apparatus, Warden and Deputy Warden's residences, and for the steam cooking apparatus, Mr. E. Chanteloup.

ST. REGIS.

CUSTOM HOUSE.

Winter sashes were provided and repairs to woodwork and chimney tops were effected.

SHERBROOKE.

PUBLIC BUILDING.

The roof was repaired, a portion of the bandroom was partitioned off; a new lamp-post in front of the building was fitted up, and some few ordinary repairs effected.

SOREL.

PUBLIC BUILDING.

A striking and illuminated clock with four dials has been placed in the tower by Mr. E. Chanteloup.

THREE RIVERS.

CUSTOM HOUSE.

A hot water heating apparatus was fitted up in the building; some fittings, &c. were supplied to the Excise Offices, and general repairs effected.

Plans, &c., prepared by this Department.
 Resident Architect, Mr. O. Z. Hamel.
 Contractors for heating apparatus, Messrs. Drapeau & Savignac.

THREE RIVERS.

POST OFFICE.

The drainage has been altered and extended ; and a new hot water furnace with additional piping and radiators put in.

Superintending Architect, Mr. O. Z. Hamel.
 Contractors for heating apparatus, Messrs. Garth & Co.

PROVINCE OF ONTARIO.

AMHERSTBURG.

Some alterations of heating apparatus and a few ordinary repairs were effected.

BARRIE.

POST OFFICE, &c.

A stone enclosure wall was built ; block pavement sidewalks were laid down on the street line ; and some fittings and furniture were supplied under the supervision of Messrs. Kennedy, Gaviller & Holland, Architects.

Contractor for fence wall, Mr. Jos. Armstrong.

BELLEVILLE.

POST OFFICE.

A flag pole was furnished ; and ordinary repairs were effected to plumbing, &c.

BERLIN.

POST OFFICE, &c., BUILDING.

A new tile drain was put in, the caretaker's apartments were cleaned, and a few repairs were executed.

BRAMPTON.

POST OFFICE PUBLIC BUILDING.

A corner lot with a frontage of 48 feet on Queen street, frontage 90 feet on Hannah Street, and a frontage of 38 feet on a lane in the rear was obtained as a site for a public building, for which plans, &c., are in course of preparation.

BROCKVILLE.

POST OFFICE, &c., BUILDING.

A granolithic sidewalk was laid in front of the building, and ventilators were placed in the basement.

CAYUGA.

POST OFFICE.

A site was obtained on the corner of King and Cayuga streets with frontages of 45 and 80 feet ; and on 23rd November last a contract was entered into for the construction of a Post Office building. When completed it will consist of a two story main building with basement and attic 38 feet 6 inches by 25 feet, and a one story

annex 25 feet by 23 feet exclusive of a brick one story vault 7 feet 9 inches by 6 feet. The walls are to be of brick with stone dressings and on a stone foundation, the floors and roofs of wood.

In the rear is to be a detached water closet of brick on a stone foundation.

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

Contractors, Messrs. Draper Bros.

CHATHAM.

POST OFFICE, &C., BUILDING.

Ordinary repairs were effected.

COBOURG.

POST OFFICE, CUSTOM HOUSE, &C.

Entrance door to upstairs was changed into a window; the staircase was taken down and the stairway hall converted into a room for the Postmaster; and some alterations were made to the Post Office fittings.

Plans, &c., prepared by this Department.

Contractor, Mr. Wm. Battell.

CORNWALL.

POST OFFICE, &C., BUILDING.

A striking clock with four illuminated dials has been placed in the tower of the building; four dormers were made in the tower for ventilation, and the clock room floored.

Plans, &c., prepared by this Department.

Contractors for clock, Messrs. Milliken & Wagner.

GALT.

PUBLIC BUILDING.

Granolithic pavement was laid down along the street line of the building by Mr. Robt Forsyth.

GANANOQUE.

POST OFFICE.

The Town Corporation having granted a site on the corner of Pine and Stone streets, plans, &c., were prepared, and on 5th December last, a contract for the construction of the building was entered into.

There will be a 2½ story main building 38 feet by 25 feet, and a one story annex 25 feet by 25 feet, exclusive of a brick vault 7 feet 9 inches by 6 feet. The basement is to be for heating furnace, &c., the ground floor for the post office, and the first floor for the caretaker's apartments. The walls are to be brick, with stone dressing and stone foundations; the roof, floors and partitions of wood; and the roof covering of galvanized iron.

Plans, &c., prepared and work superintended by this Department.

Clerk of Works, Mr. R. Brough.

Contractor, Mr. Geo. Wilson.

GUELPH.

POST OFFICE.

Some cleaning and general repairs were effected.

HAMILTON.

DRILL SHED.

The construction of this building which was described in my report for 1886-87, has since been carried on, and is now nearly completed. Drawings and specifications

for construction of building prepared by Mr. H. James, Architect, Department of Militia.

Superintending Architect, Mr. C. W. Mulligan.

Clerk of Works, Mr. Wm. Casey.

Contractor, Mr. M. A. Pigott.

POST OFFICE, &c.

Alterations and additions to the heating apparatus were made, and some additional fittings and furniture supplied.

Contractor for changes and additions, heating apparatus, Mr. Adam Clarke.

KINGSTON.

PENITENTIARY.

The following works were executed by this Department:—

Pipe duct.—A stone pipe duct, 80 feet long by 5 feet high by 2 feet 3 inches wide, inside, with stone flagging cover, was built from the kitchen boiler house to the main sewer, to carry the suction pipe of pump.

Baths.—12 wooden baths were replaced by 12 others of iron, new oak divisions were put in, the flooring was finished in cement, new entrance doors were provided, and the woodwork painted.

Asylum Recreation Grounds—A yard 47 feet by 24 feet on the west side of the Asylum was enclosed by a wall 8 feet in height of dressed stone laid in cement and capped with cut stone.

Wash House.—New joisting and flooring throughout were laid; a new roof covered with galvanized iron was constructed; new ceiling of 1 inch pine battens has been put on; galvanized iron ventiducts and ventilation to carry off vapors were put in soap-boiling room, and the stands, tables and desks replaced by new ones.

In the south end of the wash house a steam drying room was fitted up.

Barns.—The roofs of the two barns were recovered with galvanized iron, repairs were made to stable No. 3, and the floors of stable No. 1 renewed.

Dining Hall.—The jointing of flagging and inside stone wall was raked out and filled with Portland cement; the ceilings and upper part of inside of walls were calsomined, and the woodwork and ironwork painted. A stone table was constructed in the meat cellar.

Warden and Deputy Warden's Quarters.—These were generally repaired. Two cut stone chimney shafts were built to the latter; the exterior face of the walls was pointed in Portland cement; all woodwork was painted, and the outbuildings of the Deputy Warden's quarters re-roofed and covered with galvanized iron.

Ice House.—Four trussed roof principals were put in; the roof was covered with galvanized iron; the woodwork painted, and the walls pointed with cement.

Female Prison—The ground floor wooden supports were replaced by 6 stone piers; the stone stairway leading from the ground floor to the dungeons were removed; the Matron's quarters were altered, renovated and fitted with a chimney piece, and the ceiling recovered with pine sheathing, furnished with ventilators and painted.

Workshops.—The floor of the north wing, south workshops, was strengthened by heavy iron girders; and on the first floor two store rooms were fitted up for supplies.

The woodwork of the south and east workshops was painted; the exterior of the walls pointed in cement and the buildings generally repaired. The east workshop wood flooring and stone flagging were renewed and two portions partitioned off for chief keeper's office and foreman painter's room.

Kitchen Area Wall.—This was taken down and rebuilt.

Keeper's Hall.—The floor has been laid in oak.

Pork Packing House.—The position of the doors was changed and a wall built to form a passage between the west and cellar doors.

Water Service Tower.—It is intended to build this of cut stone on the highest part of the grounds about one half a mile from the prison. It will be 36 feet square and 65 feet high. The foundation walls are built and the greater part of the cut stone prepared.

Quarry Tramway.—Stone cars were repaired and about 200 ties relaid.

Gas Works.—Materials for an additional generator, a superheater and a purifier were supplied.

Flooring.—The flooring of the dormitory galleries and of 140 cells in Block A were relaid with 2-inch oak.

Asylum and Lodges.—The outside walls were pointed with cement and the roofs and woodwork painted.

Repairs to woodwork, stonework and pointing were effected at the various buildings.

A quantity of cut stone for the extension of the boundary wall on east side of gas house was prepared and laid on the site.

Superintending Architect, Mr. John Bowes.

LINDSAY.

POST OFFICE, CUSTOMS AND INLAND REVENUE OFFICES.

The site known as the Episcopal Church property having 66 feet frontage, by a depth of 196 feet, and a lane 15 feet wide in the rear was obtained; drawings and specifications for a Public Building were prepared and the contract for construction awarded.

The building is to be brick walls with stone dressings and on a stone foundation. There is to be a main building 55 feet 6 inches by 47 feet, two stories, attic and basement. A clock tower of four stories and basement, and a one story annex 57 feet by 23 feet. The ground floor of the main building is for the Post Office; the first floor is for the Customs and Excise Offices; in the attic are to be the caretaker's apartments; while in the annex are to be the Examining Warehouse and the Weights and Measures and Gas Inspector's offices.

Plans and specifications prepared by this Department.

Clerk of Works, Mr. H. Walters.

Contractor, Mr. P. Navin.

LONDON.

CUSTOM HOUSE ENLARGEMENT.

The building has been completed, fitted up and occupied.

Architects, Messrs. Durand & Moore.

Clerk of Works, Mr. John Overell.

Contractor for building, Mr. F. Toms.

Contractor for heating apparatus, Mr. W. J. Burroughs.

INFANTRY SCHOOL.

This building which was described in my report of last year has been completed and occupied.

Plans and specifications prepared by Mr. H. James, Architect, Department of Militia and Defence.

Superintending Architects, Messrs. Durand & Moore, London, Ont, who also prepared the plans and specification for the heating apparatus.

Clerk of Works, Mr. C. F. Cox.

Contractors for the erection of the building, Messrs. Hook & Toll.

Contractors for heating apparatus, Messrs. Maguire & Bird.

NAPANEE.

POST OFFICE AND CUSTOM HOUSE.

Lot No. 5 on the east side of John street having been acquired for a site during the previous year, plans, &c., were prepared and a contract for the construction of a public building entered into on the 25th January last, and the works are now in progress.

The walls are to be stone, the partitions, floors and roofs wood, and the roof covering of galvanized iron. There is to be a main building 48 by 58 feet, of two stories, besides attic and basement, the basement to contain the heating apparatus, fuel, &c., the ground floor to contain the Post Office, the first floor the Customs and Inland Revenue Offices, and the attic the caretaker's apartments; and in the rear a one story annex 21 feet by 46 feet, for Examining Warehouse, Weights and Measures and Gas Inspector's Office. There are to be vaults on ground and first floors. On the street corner is an octagonal clock tower 80 feet in height from ground level to top of roof, or 90 feet to top of finial.

Plans, &c., prepared and works supervised by this Department.

Resident Architect, Mr. Bartlett.

Clerk of Works, Mr. J. E. Herring, Napanee.

Contractor, Mr. Geo. Newlands, Kingston, Ont.

ORANGEVILLE.

POST OFFICE.

A fire proof safe was supplied.

OTTAWA.

PRINTING BUREAU.

This building which was described in my annual report for 1886-87 is in progress, and is expected to be completed by the close of fiscal year 1888-89.

Plans and specifications prepared and work supervised by this Department.

Superintending Architect, Mr. J. P. M. Lecourt.

Clerk of Works, Mr. H. L. Pinard.

Contractor, Mr. John E. Askwith.

NEW DEPARTMENTAL BUILDINGS, WELLINGTON STREET.

Drawings and specifications for iron staircases and for a hot water heating apparatus have been prepared; tenders for the iron staircases have been invited and those for the heating apparatus are to be advertised for at an early date.

Plans, &c., prepared and work superintended by this Department.

Clerk of Works, Mr. Samuel Adams.

Contractor for construction of building, Mr. A. Charlebois.

PARLIAMENT BUILDING.

Alterations were made at the apartments of the Speaker, House of Commons; a new bedroom was fitted up for him on the first floor, a new stairway built from basement to first floor; a watercloset and bath put in and the entire suite painted, repaired and papered.

Usual and ordinary repairs were effected, and furniture and fittings supplied to the building generally.

Work executed under the supervision of this Department.

EASTERN AND WESTERN BLOCK, DEPARTMENTAL BUILDINGS.

Essential repairs, cleaning, distemping, furnishing and fittings were executed and supplied under the supervision of this Department.

VICTORIA HALL.

This building, which had previously been rented for the display of the Canadian Fisheries Exhibit, was purchased, and the upper portion was altered and fitted up to accommodate the Canadian Art Gallery pictures, which were then removed there from the Supreme Court building; the Fisheries Exhibit being retained in the ground floor of the building.

Plans, &c., prepared by this Department.

Clerk of Works, Mr. H. L. Pinard.

PUBLIC BUILDINGS, REPAIRING STREETS, &c.

Bank street between Wellington and Vittoria streets, and Besserer street from Little Sussex street to the Canal Basin were macadamized.

Repairs were made to Mounted Police roadway, Nepean Point roadway, Major's Hill roadway, roadway west side of Locks, St. Patrick's Street, Cartier Square, and St. Patrick's Street sidewalks were repaired.

The various roadways, sidewalks and footpaths were kept clear of snow during the winter.

PARLIAMENT GROUNDS.

These were maintained efficiently.

MAJOR'S HILL PARK.

Further improvements have been carried on during the fiscal year, and the grounds have been kept in good order.

GEOLOGICAL MUSEUM.

Additional office room being required, an unfinished attic storey in an adjoining building was leased, divided up and finished as offices.

CENTRAL EXPERIMENTAL FARM (NEAR OTTAWA).

On 5th July last, a contract was entered into for the construction of a residence for the Superintendent General of the Experimental Farms, and at the date of this report the building is approaching completion. The building consists of a basement of stone divided into furnace and fuel room, wash room, store room and cellar; a ground floor with brick outer walls, and partitions and floors of wood, containing a parlor 16 feet by 23 feet, a library 15 feet by 20 feet, a dining room 15 feet by 22 feet, a hall 16 feet by 17 feet, a bedroom 14 feet by 16 feet, a kitchen 14 feet by 16 feet, and a scullery 11 feet by 16 feet, besides larder, sewing room, pantry, vestibule, W. C. &c.; a first floor of wood, containing six bed rooms, bath room, &c., and the attic six bed rooms.

On 1st October last a contract was entered into for the erection of four residences for the staff officials. These are wooden, two and a-half storey buildings on stone foundations. Nos. 1 and 4 are similar, containing each on the ground floor a double parlor 12 feet by 32 feet, a dining room 14 feet by 19 feet, a kitchen 14 feet by 11 feet, a hall 11 feet by 23 feet, besides vestibule, pantry, store, closet, &c.; on the first floor four bed rooms, a dressing room, a bath room and a water closet; and on the attic floor three bed rooms. Residence No. 2 contains on the ground floor a double parlor 12 feet by 25 feet, a dining room 16 feet by 16 feet, a kitchen 13 feet by 12 feet, a hall 10 feet by 17 feet, a larder, a pantry, a vestibule, &c.; on the first floor five bed rooms, a bath room and a W. C., and on the attic floor three bed rooms. Residence No. 3 contains on the ground floor a double parlor 13 feet by 26 feet, a dining room and a hall each 13 feet by 16 feet, a kitchen 11 feet by 15 feet, a pantry, a store room, a closet, &c.; on the first floor six bed rooms and a bath room; and on the attic floor two bed rooms.

On 27th August last a contract was entered into for the barn and the stabling which is connected with it, forming together a hollow square. The barn is 52 feet

in breadth by 144 feet in length, and the two ranges of stabling each 102 feet in length by 27 feet in breadth. These buildings are of wood on stone foundations, the siding being covered in part with vertical sheathing and in part with shingles with which the roofs are also covered. The barn is in three storeys of 11 feet, 13 feet and 32 feet respectively, the last being to the apex of the roof; the stabling is in two stories of 11 feet and 19 feet, the latter to the apex of the roof.

On 28th June last a contract was entered into for the construction of a building for museum, laboratories and offices. There is to be a one story portion 37 feet 6 inches by 39 feet 6 inches, to contain the laboratories and an office; and a two story portion 43 feet 6 inches by 33 feet 6 inches to contain four offices on the ground floor and a museum over; the walls are to be brick with stone dressings and foundations; the floors, roofs and partitions of wood, and the roof covering of galvanized iron.

Plans are in course of preparation for green houses, and tenders for the construction are to be called for at an early date.

A contract was entered into on the 28th March last for hot water heating apparatus for the Superintendent General's residence and the four staff residences.

Plans and specifications prepared and work executed under the superintendence of this Department.

Clerk of works for Superintendent General's residence, barn and stabling and museum and offices, Mr. W. J. Beckett.

Clerk of works for staff residences, Mr. James Gibson.

Contractor for Superintendent General's residence, Mr. F. Toms.

Contractor for staff residences, Messrs. Tobin & O'Keefe.

Contractor for barn and stabling and museum and offices, Mr. Wm. Stuart.

Contractor for heating apparatus, Messrs. F. G. Johnson & Co.

GOVERNMENT HOUSE.

A new drying shed, 36 feet by 12 feet by 12 feet, was built in garden; walls covered with vertical boarding and battens; roof shingled.

The old cow-house was removed and replaced by a new wooden building, 26 feet by 40 feet by 12 feet, clapboarded, shingled, painted, and resting on a foundation of cedar posts.

The billiard room roof, having insufficient pitch, was taken off, raised 18 inches at the ridge, and re-covered with galvanized iron.

The roof of the large storehouse and that of the gate lodge shed were re-shingled.

1,500 lineal feet of tile drain from root house and 300 feet of land tile drain in garden were laid.

Sundry carpets, rugs, articles of furniture, curtains, &c., were provided; and the usual general cleaning, repairs, minor alterations, partial repainting, whitewashing, distemping, &c., were carried out under the superintendence of this Department.

Clerk of Works, Mr. Wm. Hutcheson.

PEMBROKE.

POST OFFICE.

A site on Pembroke street, at the north-eastern end of the bridge over the Muskrat River, having been purchased during the previous year, plans, &c., were prepared, tenders invited, and the contract awarded for a building to accommodate the Post Office, Customs and Inland Revenue Offices.

The building is to be a 2½ story stone building, 41 feet by 50 feet, with wooden floors, partitions and roof, and metal roof covering, and is to contain the local Post Office on the ground floor, the Customs and Excise Offices on the first floor, the caretaker's apartments in the attic, the Examining Warehouse, Weights and Measures Office, Gas Inspector's Office, and furnace and fuel rooms in the basement.

Plans, &c., prepared and works carried out under the superintendence of this Department.

Clerk of Works, Mr. J. L. Morris, P. L.S.

Contractors, Messrs. Munro, Beatty & Grieve.

PETERBOROUGH.

POST OFFICE.

This building is completed, fitted up, furnished and provided with hot water heating apparatus.

Plans, &c., prepared by this Department.

Superintending Architect, Mr. John E. Belcher.

Clerk of Works, Mr. Thomas Rutherford.

Contractor for building, Mr. John E. Askwith.

Contractor for heating apparatus, Messrs. McAndrew & Noble.

PORT ARTHUR.

POST OFFICE.

Negotiations with a view to obtain a site are in progress.

PORT COLBORNE.

POST OFFICE, &C., BUILDING.

This building, which was transferred on 16th April last, by Order in Council from the Department of Railways and Canals, is a one story brick structure and is occupied as a Post Office, Custom House and Inland Revenue Offices.

PRESCOTT.

POST OFFICE, CUSTOM HOUSE AND INLAND REVENUE OFFICES.

A site was acquired, being part of Lots 7 and 8 in Block 2 fronting on South King street and North Water street; plans, &c., were prepared, and tenders invited, and contract for the construction of the building awarded. There are to be two buildings each two and a half stories, 49 feet by 28 feet with brick walls, stone foundations, wooden roofs, floors and partitions, and with metal roof covering. The Post Office is to front on King street, and have the ground floor for a Post Office, the first floor for Inland Revenue Offices; the attic for the caretaker's apartments, and the basement for the heating apparatus. The Custom House is to front on Water street, and will have the basement for heating furnace and fuel, the ground floor for an Examining Warehouse, and the first floor for Custom Offices; the attic unfinished.

Plans, &c., prepared and work to be superintended by this Department.

Clerk of Works, Mr. D. Barr.

Contractors, Messrs. Crain & Mix.

ST. CATHARINES.

The Post Office floor was relaid in maple; the building was provided with a flagstaff; and some ordinary repairs were effected.

ST. THOMAS.

POST OFFICE, &C., BUILDING.

An iron fence has been put up on the Talbot street front; and some ordinary general repairs executed.

TORONTO.

CUSTOM HOUSE.

Sundry articles of furniture were supplied to the Collector's Offices, and the Steamboat Inspection Office.

EXAMINING WAREHOUSE.

New boilers, steam engines and elevator were placed in the building, and the old machinery altered to suit new engine. Alterations were made to old engine room to convert it into an express office.

General repairs were made to the original portions of the building.

Plans and specifications prepared and work supervised by Mr. D. B. Dick, Architect.

Contractor for alterations and additions, Mr. J. Fletcher.

Contractor for elevator, Mr. J. Fensom.

Contractors for engine, boilers, &c., Messrs. Inglis & Hunter.

POST OFFICE.

General repairs to interior of building and to Peter street branch office, were effected.

TRENTON.

POST OFFICE, &c.

During the previous year a lot situated on the corner of Albert and Perry streets was acquired as a site, and on 2nd December last, a contract for the construction of the building was entered into. The building is to consist of a 2½ story stone main portion 40 feet by 49 feet, with a one story stone annex, 34 feet by 18 feet in the rear. The floors, partitions and roofs are to be of wood, and the roof covering of galvanized iron. The ground floor of the main portion is to be for the Post Office, the first floor for the Customs, and the attic for the Caretaker; the annex is to be the Examining Warehouse.

Plans, &c., prepared and work being carried out under the supervision of this Department.

Clerk of Works, Mr. Geo. Crowe.

Contractor, Mr. Walter Alford.

PROVINCE OF MANITOBA.

BRANDON.

IMMIGRANT BUILDING.

Essential repairs were executed to woodwork, painting, &c.

STONY MOUNTAIN.

MANITOBA PENITENTIARY.

Warden's Residence.—A gasoline apparatus, gas fittings and electric bells were put in, furniture and carpets were supplied, and painting and kalsomining done to woodwork and walls.

Hospital and Laundry.—This building which was described in my report of last year has been completed and occupied; a hot water heating apparatus has been put in, and contracts have been entered into to fit up the hospital attic as kitchen and recreation room, and to put in fittings and machinery of laundry. The Surgeon's dispensing room has been fitted up and furnished.

New Chapels.—These which were fully described in my report of last year, have been completed and furnished with a hot water heating apparatus.

Warden's Store and Fuel Building.—A one and a half story brick building, 30 feet by 20 feet, carried out by day labor.

Warden's Stables.—A brick one and a half story building, 54 ft. by 44 ft., the ground floor divided into cow and horse stalls and loose boxes, carriage house and harness room, and the attic for hay-loft. Construction was commenced at the close of the fiscal year, and it is expected that the building will be completed before the autumn.

Guard's Cottages.—Six additional cottages for guards were commenced and completed during the fiscal year.

Surgeon's and Chaplains' residences.—Plans are prepared and the foundation of the Surgeon's residence put in.

General.—A new engine for pumping and lathe work was supplied. A new barbed wire corral for cattle and fence for hay stacks were put up; new eave troughs and conductors were supplied to prison building, and general repairs done to drains, plumbing, glazing, &c.

Plans, &c., prepared by this Department.

Clerk of works, Mr. D. Smith.

Contractor for construction of hospital and laundry, Messrs. Rourk & Cass.

Contractors for heating apparatus, hospital and chapels, and for machinery and heating laundry, Messrs. Garth & Co.

WINNIPEG.

CUSTOM HOUSE.

Some minor repairs were made and some additional furniture supplied.

Resident Clerk of Works, Mr. D. Smith.

IMMIGRANT SHED.

Plans and specifications were prepared for a building to replace that destroyed by fire; but owing to the want of a suitable site, nothing further has been accomplished.

Resident Clerk of Works, Mr. D. Smith.

INFANTRY SCHOOL.

This building, which was referred to in a previous report, was completed in October last and transferred to the Department of Militia for occupation.

Resident Architect, Mr. W. Chesterton.

Contractors, Messrs. Murray & McDiarmid.

POST OFFICE

The uppermost story of the building was fitted up and furnished as offices for the Dominion Land Office.

Platforms and escape ladders were placed to each flat in rear of building; safety doors were placed on elevator, and some alterations to carpentry, plumbing, machinery, boiler, &c., were effected.

Plans, &c., prepared by this Department.

Resident Clerk of Works, Mr. D. Smith.

NORTH-WEST TERRITORIES.

CALGARY.

BARRACKS.

Contracts for the following buildings were entered into on 21st December, 1887, and the buildings are in progress:—

Barrack's Mess-room and Kitchen.—A two-story main building of wood 266, ft. by 32 feet, with a one-story building in rear, 66 feet by 52 feet, all of wood.

The main barrack building contains six barrack rooms, 30 feet by 22 feet, on each floor, and the rear building a mess room, a kitchen, a scullery and two wash-rooms.

Hospital.—A one-story wooden building to contain two wards, 22 feet by 23 feet each, a surgery, 17 feet by 12 feet 6 inches, a dining room, 17 feet by 12 feet, a kitchen 12 feet by 12 feet, a bathroom, 10 feet by 10 feet, besides hospital steward's room, hall, storeroom and closets.

Plans, &c., prepared and work carried out under the supervision of this Department.

Clerk of Works, Mr. C. B. Kenway.

Contractors, Messrs. Kennedy & Heney.

BATTLEFORD.

MOUNTED POLICE BUILDINGS.

Extensive repairs and renewals of guard-house were effected and the barracks plastered and finished.

Plans, &c., prepared by this Department.

Resident Clerk of Works, Mr. A. F. Berthiaume.

EDMONTON.

COURT HOUSE.

Some fittings and furniture were supplied.

LETHBRIDGE.

MOUNTED POLICE BUILDINGS.

The two buildings erected last year for officers' quarters were remodelled under the Commissioner's direction, and woodsheds, and 6 feet platforms, 6 feet wide, were added.

The Division mess room was enlarged and the chimney was taken down and rebuilt. Privies were built for Sergeants' Mess and single officers' quarters, and a 10 feet wide platform was erected along the entire front of the barrack building. The attics of barracks and mess room were floored.

The following buildings were erected during the fiscal year:—

Stable building similar to that constructed last year.

A building for single Officers' Quarters.

An addition to Quartermaster's Store and Offices, 60 feet by 28 feet, for N.C.O. Mess and Quarters.

A saddle room, 24 feet by 48 feet.

A smith's shop, 24 feet by 24 feet.

Artisans' shops for carpenters, saddlers and tailors, and to accommodate the veterinary surgeon's dispensary.

A cook's quarters and pantry added to the division kitchen.

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

Resident Clerk of Works, Mr. B. C. Kenway.

MACLEOD.

CUSTOM HOUSE.

A one and a half story wooden building, with a stoop in the rear was erected to serve as a Custom House and Bonded Warehouse.

BARRACKS.

New chimneys were built to the barrack buildings and some ordinary repairs executed.

MAPLE CREEK, TOUCHWOOD HILL AND WOOD MOUNTAIN.

A log house to be used as an outpost by the Mounted Police was erected at each of these localities.

MEDICINE HAT.

BARRACKS.

The woodwork of the barrack building was painted and some ordinary repairs executed.

PRINCE ALBERT.

COURT HOUSE AND JAIL.

This building which was described in my report of last year has been completed, fitted up, furnished and occupied. Fire proof vaults were built on ground floor for Sheriff and County Court, and spare vault in basement. A log stable, 18 feet by 24 feet, with a waggon shed, 12 feet by 24 feet, were built. 1,188 feet of wire fence with gates, and 150 feet of board fence were put up. Prisoners' latrines were built in yard.

Plans, &c. prepared by this Department.

Clerk of Works, Mr. H. J. Peters.

Contractor, Mr. Thos. Doddridge.

NORTH-WEST MOUNTED POLICE BUILDINGS.

These buildings which are now completed were carried out by days' work. They are of wood.

Barrack Building.—158 feet 8 inches by 27 feet 8 inches, with rear wing 88 feet 4 inches by 27 feet 8 inches and two annexes to main building, each 23 feet 6 inches by 13 feet; 530 feet lineal of drain from washhouse to cess pit.

Officers' Quarters.—37 feet by 24 feet 6 inches, with two annexes for kitchens, one 18 feet 6 inches by 21 feet, and the other 10 feet by 14 feet.

Guard Room.—48 feet by 24 feet.

Sergeants' Mess Building.—50 feet by 26 feet, with an annex kitchen 27 feet 6 inches by 16 feet.

Quartermaster's Store.—60 feet by 30 feet, with frost proof cellar under one half the area.

Quartermaster's General Store.—32 feet by 22 feet.

Ice House.—20 feet by 20 feet.

Sick Stable.—50 feet by 28 feet.

Blacksmith's Shop.—24 feet by 24 feet.

Stables.—Two buildings, each 76 feet 2 inches by 24 feet 8 inches, and with an annex 12 feet by 29 feet 8 inches, for saddlery.

Artisan's Shop.—24 feet by 28 feet, divided for four trades.

Latrines.—Two sets, each 16 feet by 8 feet.

The square was graded, 1,000 feet lineal of four feet wide sidewalk was laid and a flag pole 84 feet high was erected.

Plans, &c., prepared by this Department.

Resident Clerk of Works, Mr. H. J. Peters.

QU'APPELLE.

INDUSTRIAL SCHOOL.

The addition for girls schools referred to in my last report is nearly completed.

Plans, &c., prepared by this Department.

Clerk of Works, Mr. Jas. Morrison.

REGINA.

MOUNTED POLICE BUILDINGS.

Barracks.—These were described in my report of last year, since when they have been completed, fitted up with tables, arm racks, &c., and occupied. A complete system of drainage, including cesspool has been put in. Outside storage tanks for water and inside supply cisterns in attics have been provided.

Stables—An addition 16 feet by 30 feet, to form shelter sheds was made to each of the seven stables.

Commissioner's Residence.—Described in my last annual report and since then completed and occupied. An old building was removed to the site and converted into a stable.

Surgeon's Residence.—Described in last annual report and since completed and occupied.

Officers' Quarters.—Five of the old barrack buildings were converted into and fitted up as Officers' Quarters and occupied.

Sergeants' Mess.—An old barrack building was fitted up for this purpose.

Hospital.—This which was described in the last annual report was completed and occupied.

Generally.—A Canteen was formed out of an old mess room, two brick chimneys were built to the Quartermaster's store and some general repairs were made.

Plans, &c. were prepared and work carried out under the supervision of this Department.

Resident Clerk of Works, Mr. Jno. Morrison.

Contractor for Commissioner's residence and barracks, Mr. R. H. Williams.

Contractor for surgeon's Residence and Hospital, Mr. Jno. McRea.

NORTH-WEST COUNCIL CHAMBER.

Council Chamber repapered and repainted.

Resident Clerk of Works, Mr. Jno. Morrison.

INDIAN OFFICES.

A stone foundation was constructed under the building, the walls were brick-veneered and the outside woodwork painted.

Resident Clerk of Works, Mr. Jno. Morrison.

COURT HOUSE.

The interior was cleaned, calsonimed and painted; and supplied with some necessary furniture, fittings and stoves.

Resident Clerk of Works, Mr. Jno. Morrison.

JAIL AND LUNATIC ASYLUM.

Fences and outbuildings were erected, a well-house was built, and a force pump put in building.

Resident Clerk of Works, Mr. Jno. Morrison.

POST OFFICE.

Some minor repairs were effected.

Resident Clerk of Works, Mr. Jno. Morrison.

LIEUTENANT GOVERNOR'S RESIDENCE.

The outside of kitchen was re-sided and some minor repairs done to woodwork.

Resident Clerk of Works, Mr. Jno. Morrison.

RIDING AND DRILL HALL.

This building was destroyed by fire 26th November, 1888.

[1888]

FORT SASKATCHEWAN.

MOUNTED POLICE BARRACKS.

The Barrack Buildings were repaired and enlarged.

PROVINCE OF BRITISH COLUMBIA.

NANAIMO.

POST OFFICE, &c.

An inside storm porch was erected in the Post Office lobby; some repairs were made to the roof; gas has been laid in the building and the water pipes extended to the first floor.

NEW WESTMINSTER.

PENITENTIARY.

Laundry.—The heating and fittings referred to in last year's report are completed, as also water closets, urinals, baths, and cisterns for hot and cold water.

Water Supply.—The dam has been cleaned out to a depth of 2 feet, and the water thereby improved. The main water pipes to Gaards' cottages being choked were taken up and replaced by 2 inch pipes, and sundry additions made to the service. In the prison building the 3 inch main has been extended to the roof with fire plugs on each floor.

Gas Supply.—The New Westminster Gas Company has extended its 3 inch main to the penitentiary, and gas piping, fixings and fixtures fitted for the lighting of the entire prison building with gas.

Dwelling for single Officers.—A contract for this building was entered into on 27th March last and is expected to be completed by next autumn.

Sundries.—The cow house was floored in cement, and a new range supplied for the kitchen.

Repairs.—Necessary repairs to the main building, fencing, drains, dam, water-pipes, &c., were effected.

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

Contractors for cottages, Messrs. Ackerman Brothers.

PUBLIC BUILDING.

The building has been fitted up for gas.

Some minor alterations and additions were made to the first floor for the convenience of the customs and Savings Bank officials occupying the building.

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

VICTORIA.

CUSTOM HOUSE.

Some minor repairs were executed and the roof painted under Mr. F. C. Gamble's supervision.

DOMINION SAVINGS BANK.

A large safe was supplied and placed in the vault of the Bank of British Columbia.

POST OFFICE.

Repairs were made to the roof; the roof and outside walls were painted and the inside walls and ceilings kalsomined. The Money Order Office was enlarged; general repairs were effected, and some furniture supplied.

Work executed under the supervision of Mr. F. C. Gamble, C. E.

ENGINEERS, ENGINEMEN, FIREMEN, &c., PUBLIC BUILDINGS.

The various engineers, enginemen, firemen and caretakers, and the heating apparatus of Dominion Public Buildings, with the exception of those at the various Penitentiaries, Military Buildings, and at the Post Offices and Custom houses at Kingston and Quebec, are now under the control of this branch of the Department.

HEATING DOMINION BUILDINGS (FUEL)

Tenders were invited by public advertisement, and fuel was supplied to 76 of the Public Buildings.

LIGHTING DOMINION BUILDINGS.

The lighting of the various Dominion Buildings, excepting that of the Penitentiaries and Military Buildings, is under the charge of and was administered by this branch of the Department.

WATER FOR DOMINION BUILDINGS.

The water supply of the various Public Buildings, excepting the Penitentiaries and Military Buildings, is administered by this branch of the Department.

GENERALLY.

Usual and ordinary repairs were effected, furniture supplied, and cleaning, and coloring done to a large number of buildings not herein referred to.

APPENDIX No. 3.

LIST

OF

ENGINEERS, ENGINEMEN, FIREMEN AND CARETAKERS

OF

PUBLIC BUILDINGS THROUGHOUT THE DOMINION,

GIVING

DATE OF APPOINTMENT, SALARY PAID, ETC.

APPENDIX No. 3.

Ref. No. 93013.

STATEMENT showing the Engineers, Firemen, Caretakers and Watchmen employed at Dominion Public Buildings, on 30th June, 1888, giving Date of appointment, Salary, &c.

Place.	Building.	Name.	Position.	Date of Appointment.	Salary per Month.	Time employed per Annum.	Total Amount paid per Annum.
					\$ cts.		\$ cts.
Amherst	Post Office.	James Morrison.	Caretaker.	2nd November, 1886.	33 33	12 months.	400 00
Antigonish	Public Building.	H. P. Hill	do	1st March, 1887.	3 75	12 do	45 00
Arichat	Building on P. O. Site.	John McAsbill	do	16th September, 1887.			15 00
Saddeck.	Public Building.	Alex. McDonald	Engineer.	23rd December, 1886.	16 67	12 do	200 00
Halifax.	Dominion Building.	John Powell	Fireman.	1st October, 1871.	62 50	12 do	750 00
do	do	Richard Power.	Watchman.		50 00	6 do	300 00
do	do	W. Sullivan.	do	31st October, 1883.	33 33	12 do	400 00
do	Examining Warehouse.	Jno Dunn	Caretaker.		39 00	12 do	468 00
do	Penitentiary	Wm. Power.	do	26th January, 1887.	41 67	12 do	500 00
New Glasgow.	Post Office.	M. Kennedy.	do	31st October, 1880.	37 50	12 do	450 00
Pictou.	Custom House	Jas. Fraser.	do	1st November, 1886.	33 33	12 do	400 00
Truro.	Post Office	Geo. Robson	do	1st January, 1888.	33 33	12 do	400 00
Windsor	do	G. Johnson.	do	14th October, 1885.	33 33	12 do	400 00
Yarmouth	Public Building	Robt. Speers.	do	30th July, 1886.	33 33	12 do	400 00
Charlottetown.	Dominion Building	J. W. Smith	Engineer	23rd December, 1886.	33 33	12 do	400 00
do	do	D. McLeod.	Fireman.	12th September, 1872.	33 33	12 do	400 00
do	do	J. S. McLeod.	Watchman.	13th December, 1887.	28 00	12 do	336 00
do	do	Jas. Grant	do	18th August, 1881.	37 03	12 do	450 00
do	do	(Geo. Walker	Caretaker.		37 03	12 do	450 00
Montague.	Public Building	Martin Lambert.	Watchman.	12th January, 1887.	33 33	12 do	400 00
Summerside.	Dominion Building	James Brazil	do	5th November, 1885.	33 33	12 do	400 00
Bahurst	Post Office.	J. A. Melançon	Caretaker.	13th April, 1887.	33 33	12 do	400 00
Dorchester	Penitentiary	Jas. Piercy	Engineer	21st November, 1883.			
Fredericton	Post Office	Jas. Perkins	Caretaker.	31st May, 1881.	33 33	12 do	400 00
Moncton	do	Eza. B. Hicks.	do	11th January, 1886.	33 33	12 do	400 00
Newcastle	do	Patrick Keating.	do	2nd October, 1886.	33 33	12 do	400 00
St. Stephen.	do	Samuel Topping	do	26th May, 1887.	33 33	12 do	400 00
Sussex.	do	Thomas Asbill	do	19th October, 1883.	33 33	12 do	400 00
St. John	Custom House	G. H. Jones.	Engineer	17th February, 1880.	60 00	12 do	720 00

Location	Post Office	Christopher White	Fireman	9th November, 1885...	50 00	6	300 00
do	do	T. W. Shaw	Caretaker	8th December, 1881...	41 67	12	500 00
do	do	Henry Howe	Engineer	4th November, 1881...	55 00	12	540 00
do	do	Ed. Haney	do	27th do	45 00	12	540 00
do	do	Geo. Campbell	Caretaker	29th October, 1880	37 50	12	450 00
do	do	Thos. H. Lawson	Engineer	28th January, 1879	33 33	12	400 00
Woodstock	do	Richard Maxted	Caretaker	8th October, 1885	16 66	12 months	200 00
Hull	N.B.	Thomas Paquin	Caretaker	9th January, 1888	50 00	12	600 00
do	Que.	M. Boyer	Fireman	4th March, 1882	65 00	12	720 00
Montreal	Que.	John Watson	Engineer	18th October, 1876	65 00	12	780 00
do	do	F. Greene	do	1st January, 1885	80 00	12	980 00
do	do	Thos. Ryan	do Public B'd'g.	4th March, 1883	80 00	12	400 00
do	do	W. Wallace	do	1st October, 1882	50 00	8	400 00
do	do	J. H. Marchand	do	2nd December, 1883	50 00	8	400 00
do	do	J. B. Emond	Caretaker	11th January, 1886	1.50 p.d	12	547 50
Quebec	Que.	Jas. Mathews	Fireman	4th December, 1885	55 00	12	660 00
do	do	Wm. Stephens	do	29th October, 1886	30 00	8	240 00
do	do	John O'Neil	do	8th September, 1886	45 00	8	360 00
do	do	C. Juneau (not paid by this Department)	Engineer	1st July, 1876	...	...	...
Sherbrooke	Que.	T. Rawson	Caretaker	12th December, 1884	33 33	12	400 00
Sorel	Que.	P. St Michel	do	22nd September, 1886	33 33	12	400 00
St. Johns	Que.	Jos. Farrant	Watchman	9th September, 1882	16 67	12	200 00
do	Que.	Wm. Comper	do	— December, 1881	12 50	12	150 00
Three Rivers	Que.	J. G. Lajoie	Caretaker	1st March, 1883	58 33	12	700 00
do	Que.	Jos. Carbonneau	do	31st July, 1883	33 33	12	400 00
Amherstburg	Ont.	John Lovegrove	do	6th November, 1886	33 33	12	400 00
Brockville	Ont.	Wm. Shepherd	do	6th April, 1888	33 33	12	400 00
Branford	Ont.	John Squire	do	27th October, 1880	33 33	12	400 00
do	Ont.	do	Engineer	do	50 00	12	600 00
Belleville	Ont.	J. P. Reeves	Caretaker	17th October, 1883	50 00	12	600 00
Barrie	Ont.	Fred. Edwards	do	2nd March, 1886	33 33	12	400 00
Berlin	Ont.	Aug. Meinke	do	1st November, 1886	33 33	12	400 00
Clifton	Ont.	Gilbert Campbell	do	8th October, 1885	33 33	12	400 00
Chatham	Ont.	Henry Dunn	Engineer	23rd September, 1884	50 00	7	350 00
Cornwall	Ont.	Thomas Murphy	Caretaker	17th March, 1885	30 42	12	365 04
Gait	Ont.	Wm. Kigoar	do	23rd September, 1886	33 33	12	400 00
Guelph	Ont.	A. H. Goodve	do	26th August, 1884	33 33	12	400 00
Hamilton	Ont.	Thos. Nicholson	In charge of hoist	2nd March, 1887	45 00	12	540 00
do	Ont.	Wm. Horaby	Engineer	9th October, 1886	41 67	12	500 00
do	Ont.	Thos. Beatty	Caretaker	1th November, 1887	45 00	8	360 00
King ton	Ont.	W. Johnson	Engineer	31st May, 1881	...	...	...
do	Ont.	M. Madden	Fireman	13th October, 1876	...	...	...
do	Ont.	Jas. Devlin	Engineer	9th April, 1876	...	...	...
do	Ont.	Chas. Munro	Fireman	23rd July, 1883	60 00	12	720 00
do	Ont.	Chas. McAvoy	do	...	60 00	12	600 00
do	Ont.	John Mulkeru	do	...	60 00	12	600 00
London	Ont.	Wm. Greer	Engineer	18th September, 1884	...	...	...
do	Ont.	John Price	Caretaker	16th March, 1884	...	...	...
do	Ont.	do	Fireman	14th January, 1884	50 00	12	600 00

52 (APPENDIX No. 3)—STATEMENT showing the Engineers, Firemen, Caretakers and Watchmen employed on Dominion Public Buildings, &c.—Continued.

Place.	Building.	Name.	Position.	Date of Appointment.	Salary per Month.	Time employed per Annum.	Total Amount Paid per Annum.
					\$ cts.		\$ cts.
Orangeville..... Ont...	Public Building.....	John Wilkins.....	Caretaker.....	15th September, 1886...	33 33 12	do ...	400 00
Peterborough..... Ont...	do	James Irwin.....	do	8th do 1887...	33 33 12	do ...	400 00
Port Colborne..... Ont...	do	Wm. Armstrong.....	do	11th June, 1888...	15 00 12	do ...	180 00
Port Hope..... Ont...	do	Levi Reynolds.....	do	17th November, 1885...	33 33 12	do ...	400 00
Strafford..... Ont...	do	J. H. Roberts.....	do .....	.....	50 00 12	do ...	600 00
St Catharines..... Ont...	do	W. Bryson.....	do	9th August, 1883.....	33 33 12	do ...	400 00
St. Thomas..... Ont...	do	Jas. Russell.....	do	4th September, 1885...	33 33 12	do ...	400 00
Toronto..... Ont...	Dominion Buildings.....	J. A. Wills.....	Engineer.....	23rd August, 1873.....	100 00 12	do ...	1,200 00
do	Custom House.....	Jas. Humphreys.....	Fireman.....	16th November, 1881...	50 00 6	do ...	300 00
do	Examining Warehouse.....	Jas Cosgrove.....	Engineer.....	23rd December, 1874...	60 00 12	do ...	720 00
do	Post Office.....	Henry L. Bell.....	do	9th May, 1885.....	50 00 6	do ...	300 00
do	do	Fred. Simons.....	Fireman.....	1st January, 1887.....	50 00 12	do ...	600 00
do	Revenue Building.....	Ed. Appleton.....	do	23rd September, 1886...	50 00 6	do ...	300 00
Windsor..... Ont...	Post Office.....	Jas. Olaxton.....	do	15th October, 1882...	50 00 12	do ...	600 00
Winnipeg..... Man...	Post Office Building.....	John Hannon.....	Engineerman.....	7th do 1880.....	70 00 12	do ...	840 00
do	do	J. P. Alexander.....	do .....	.....	45 00 12	do ...	540 00
do	do	Jos. Ooster.....	do	27th October, 1887...	45 00 12	do ...	540 00
do	do	Ed. LeCourt.....	do	12th June, 1888.....	50 00 12	do ...	600 00
Nanaimo..... B. C...	do	Jos. Gauchon.....	Caretaker.....	10th November, 1883...	50 00 12	do ...	600 00
New Westminster..... B. C...	Public Building.....	John Thompson.....	do	1st October, 1884...	50 00 12	do ...	600 00
Prince Albert..... N. W. T...	do	John McMurphy.....	do .....	.....	50 00 12	do ...	600 00
do	Court House and Jail.....	George Northgraves.....	do	14th June, 1887...	33 33 12	do ...	400 00

R. STECKEL.

APPENDIX No. 4.

REPORT

ON THE

HEATING APPARATUS, GAS, WATER & BELL SERVICES, &c.

IN THE

PUBLIC BUILDINGS, OTTAWA,

For the Fiscal Year Ended 30th June, 1888,

BY

JOHN R. ARNOLDI, CHIEF MECHANICAL ENGINEER.

APPENDIX No. 4.

REPORT OF THE CHIEF MECHANICAL ENGINEER.

Ref. No. 90,637.

CHIEF MECHANICAL ENGINEER'S OFFICE,
OTTAWA, 21st August, 1888.

SIR,—I have the honour to report as follows, in reference to the Public Buildings, Ottawa, during the fiscal year ended the 30th June, 1888, viz :—

PARLIAMENT BUILDINGS.

Nothing was required to be done during the past year to electrical apparatus, boilers, water, gas or bell services of this building beyond ordinary maintenance.

It was found necessary to replace the old pan water closets in connection with the Speaker's quarters of the House of Commons and Senate with an improved modern pattern. The ventilation of these closets and of the Railway Committee room was considerably improved.

EAST AND WEST BLOCKS.

These buildings required little to be done beyond the ordinary maintenance to the heating apparatus, boilers, gas, water and bell services.

SUPREME COURT.

Ordinary maintenance only was required in this building to the heating apparatus, boilers, gas, water and bell service.

OTTAWA POST OFFICE AND CUSTOM HOUSE.

Three new water closets, &c., were placed in this building during the past year with improved ventilation; otherwise ordinary maintenance to the heating apparatus, gas, water, and bell service was all that was required.

GEOLOGICAL MUSEUM.

Nothing but the ordinary repairs to the water, gas and bell service was required in this building.

PARLIAMENT GROUNDS FLOWER PROPAGATING HOUSE.

No work was required in this building.

INDIAN AFFAIRS (LEASED.)

Ordinary maintenance to water, gas and bell services only was required to be done in this building.

POST OFFICE DEPARTMENT (LEASED) SAVINGS BANK BRANCH.

Nothing but the ordinary maintenance was required in connection with the water, gas and bell services.

MAJOR'S HILL PARK.

No work was required here further than ordinary repairs to the water mains, hose &c., used for watering purposes.

RIDEAU HALL.

Ordinary maintenance only was found necessary to the heating apparatus, gas, water and bell services.

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

JNO. R. ARNOLDI,
Chief Mechanical Engineer.

A. GOBEL, Esq.,
Secretary Department of Public Works.

APPENDIX No. 5.

REPORT

ON

HARBOURS AND RIVERS, DREDGES, DREDGING AND SURVEYS

THROUGHOUT THE DOMINION.

FOR THE FISCAL YEAR ENDED 30TH JUNE, 1888.

BY

HENRY F. PERLEY, CHIEF ENGINEER.

APPENDIX No. 5.

REPORT OF THE CHIEF ENGINEER.

Ref. No. 92,368.

CHIEF ENGINEER'S OFFICE,
OTTAWA, 27TH OCTOBER, 1888.

SIR,— I have the honour to submit herewith my annual report on the harbour works under my charge during the last fiscal year.

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

HENRY F. PERLEY,
Chief Engineer.

A. GORRIL, Esq.,
Secretary Public Works Department.

PRINCE EDWARD ISLAND.

BELFAST PIER.

Belfast Pier, or Halliday's, is on the south side of Orwell Bay, in Queen's County.

Repairs were made to the western end of the pier to admit of the regular steamer landing passengers and freight.

CASCOMPEC.

In Prince County, on the north coast of the island, about 20 miles south of North Cape.

The work of forming a channel through the rocky bar which obstructs the entrance to the harbour of Cascumpec, commenced in 1885, was continued during the past fiscal year.

HICKEY'S PIER.

Hickey's Pier, Queen's County, is on the south-eastern side of the Hillsboro' River, about 10 miles north-west from Charlottetown.

During the year some piles were driven around the outer block, and the planking was renewed in places; a new landing slip was constructed, and the approach to the pier was partly rebuilt and filled with brush, stone and clay.

MURRAY HARBOUR.

South Murray Harbour Pier, King's County, is at the head of navigation on the South River.

The pier at this place received general repairs, being raised in places and ballasted, and the approach was made good.

NEW LONDON.

The Harbour of New London is on the northern side of the Island, about 10 miles south-east of Richmond Bay.

Repairs where made, were necessary, to the works of this harbour.

NINE MILE CREEK.

This pier is in Queen's County, and is situated 5 miles west of the Block House Light at the entrance to Charlottetown Harbour, in the shallow inlet opening into the passage between St. Peter's Island and the mainland.

General repairs were made to the structure, which has a length of 390 feet and an average width on top of 20 feet.

NORTH CARDIGAN.

This pier is on the north shore of Cardigan River, near its entrance into Cardigan Bay.

Small repairs were made to the roadway to render it available for present use.

PINETTE.

This pier is on the south side of the main Pinette River, near the Junction of the north and south branches.

New floor stringers were put in, flooring was renewed, fenders were secured, ballast made good, and other repairs executed to place the pier in proper order.

SOURIS.

Souris, the eastern terminus of the Island Railway, is in King's County, and about 16 miles south of East Point.

The inner end of the breakwater, over a distance of 800 feet, was raised where necessary, fully ballasted, and other improvements effected.

TIGNISH.

At the mouth of the Big Tignish River, Prince County, about 8 miles east of North Point.

The "Dredge Prince Edward" was engaged at the commencement of the fiscal year in deepening the channel at this place, working until the 27th August.

VERNON RIVER.

Vernon River Pier is situated at the head of navigation on the river, about two miles above its entrance into Orwell Bay.

Extensive repairs and improvements were made on this pier during the past fiscal year.

VICTORIA PIER.

Victoria Pier, Crapaud, is at the head of navigation inward from Crapaud Basin. One of the spans of this pier which was out of order was attended to and made good.

NOVA SCOTIA.

ARISAIG.

Arisaig, Antigonish County, is on the south-east shore of the Strait of Northumberland, midway between Cape George and Merigomish.

The repairs to the pier, and the construction of the breakwater referred to in the report of last year, have been completed.

BAYFIELD.

Antigonish County, is on the southern shore of St. George's Bay. The harbour is formed by Pomquet Island and an outlying reef.

The construction of a further length of breakwater, commenced in 1886-87, was continued, and at the close of the fiscal year was about three-fifths completed.

BAYFIELD WHARF.

The wharf is on the western side of Bayfield Harbour, a quarter of a mile to the south of the breakwater, is 402 feet in length and varies in width from 22 to 50 feet.

In November, 1887, a contract was let to repair, raise and close pile the two outer blocks and to construct new work between them and the shore, and at the end of the fiscal year the work was virtually completed.

BAY ST. LAWRENCE.

Bay St. Lawrence, Victoria County, lies at the northern end of Cape Breton Island, between Capes North and St. Lawrence.

The channel, which was opened during 1886-87 and mentioned in the report of last year as having been filled in with a storm, was again opened, but with no better success, the same filling in taking place as in the previous year.

BIG BRAS D'OR.

Big Bras d'Or, Victoria County, is on the south side of the channel of the same name, near its entrance into the Atlantic.

A wharf, 160 feet in length, 20 feet wide, with a return at the outer end giving a channel face of 60 feet and a depth of 11 feet at low tide, is under construction and was about half finished at the end of the fiscal year.

BIG POND.

Cape Breton County, on the south side of East Bay, Big Bras d'Or Lake.

A wharf 160 feet in length, 20 feet in width, with a depth of 8 feet at its outer end at lowest lake level, is being built at this place.

BLUE ROCK.

Blue Rock, Antigonish County, is on the south coast of St. George's Bay, $2\frac{1}{2}$ miles east from Tracadie Harbour.

In November, 1886, a contract was entered into for the construction of a breakwater 326 $\frac{1}{2}$ feet in length, and at the 30th June, 1888, about one-third of the work had been done.

BROAD COVE MARSH.

Inverness County, is on the Gulf of St. Lawrence, 19 miles north of Mabou and 12 miles south of Margaree.

Up to the close of the fiscal year work was continued on the construction of the wharf mentioned in the report of last year, 344 feet of work having been placed by the contractors and built up to a height of 8 feet above assumed low water.

CHETICAMP.

Is in Inverness County, on the Gulf of St. Lawrence, 58 miles north from Mabou.

Between 1st August and 21st October, 1887, the dredge "George McKenzie" was employed in giving a depth of 13 feet of water in the channel leading into the harbour at this place.

CLIFTON (OLD BARNS).

Clifton, Colchester County, is at the head of Cobequid Bay, about 7 miles distant from Truro.

During the last fiscal year a loading wharf, 237 feet long, was built at this place.

COMBEAUVILLE.

The wharf at Comeauville, Digby County, is on the southern shore of St. Mary's Bay, about 3 miles south and west from Church Point, and is one of those taken over by the Dominion from the Local Government.

Extensive repairs were made to the structure, and it was put in good order for traffic.

COW BAY.

On the eastern coast of Cape Breton, about 18 miles south-east from Sydney.

Extensive repairs were made to this important breakwater during the fiscal year, and an annual expenditure will be required to maintain it as it is exposed to the direct sweep of the Atlantic during easterly gales, and is much weakened by the attack of the *teredo*.

CRANBERRY HEAD.

Is on the Bay of Fundy, about 6 miles north of the town of Yarmouth. Some small general repairs were made to the pier at this place.

DIGBY.

Digby is the shiretown of the county of that name, and is situated at the western end of Annapolis Basin.

The work undertaken during the year consists in the construction of a block 40 by 40 feet on site of displaced outer block, of an inclined landing 26 feet wide and 80 feet long between the new outer block and the undestroyed inner portion of the pier, and a roadway on pile and framed beams connecting the old work with the new outer block.

A contract was entered into for the removal of the portion of the outer block which had been washed into the dredged channel on the south side of the wharf, and at the close of the fiscal year the work was in progress, though but little had been done.

EATONVILLE.

Eatonville, formerly called "Three Sisters," is in Cumberland County, about 10 miles north of Cape Chignecto.

At the close of the fiscal year a commencement had been made of the work of constructing a wharf 120 feet in length and 20 feet in width.

ECONOMY.

Economy, Colchester County, is on the north side of the Basin of Minas.

A wharf 216 feet in length, 24 feet in width, with 12 feet of water at ordinary tides at its outer end was completed at this place during the year ended 30th June last.

INGONISH.

In Victoria County, on the north-east coast of the Island of Cape Breton, midway between Sydney and Cape North.

The beach protection works, referred to in the report of last year, were completed.

LISMORE.

Lismore, Pictou County, is on the Strait of Northumberland, 18 miles east of Pictou Harbour.

The wharf, 200 feet long and 20 feet wide on top, which was under construction last year, has been completed.

LITTLE NARROWS.

Little Narrows, Victoria County, is a contraction of St. Patrick's Channel of the Great Bras d'Or Lake.

During the year a wharf 129½ feet in length, 20 feet in width, with an L at the outer end, at which there is a depth of 14 feet, was built on the south side of the Narrows.

LOWER HORTON.

Lower Horton, King's County, is situate midway between Wolfville and Avonport.

At the close of the fiscal year the work of repairing this wharf was commenced, the timber having been procured during the winter.

MABOU.

Is in Inverness County, 6 miles to the north of Port Hood, on the west coast of Cape Breton.

During the year ended 30th June, 1888, the amount appropriated was expended in increasing the height of the brush and stone work built to arrest the travel of sand from the westward, and in extending it a length of 187 feet. This wall now has a total length of 1,112 feet, and the channel has improved since its construction.

MARGARETVILLE.

In Annapolis County, is on the southern shore of the Bay of Fundy, about 42 miles east of Digby Gut.

The works of repair to the pier at this place, referred to in the report of last year, were continued to the extent of the amount authorized.

M'NAIR'S COVE.

McNair's Cove, Antigonish County, is on the western shore of St. George's Bay, 5 miles south-west from Cape George.

During the year ended 30th June, 1888, the contractor delivered the materials required for the reconstruction of 160 feet of the breakwater, constructed a block 80 feet in length, ready to be sunk into position, and nearly completed the excavation for the foundation of the work.

METEGHAN COVE.

Meteghan Cove, Digby County, is on the southern shore of St. Mary's Bay, about 25 miles from Yarmouth and 40 from Digby.

The seaward face of the pier at this place was close sheathed over a length of 700 feet, 575 feet of the inner face were repaired and sheathed, the work levelled up and other works of repairs executed.

MOIDART.

Moidart, Antigonish County, is on the Strait of Northumberland, 3 miles west from Arisaig.

A large rock has been made available as a landing for boats by the removal of boulders from its eastern side, by levelling off its top over a distance of 28 feet, and building an approach 73 feet in length.

PARRSBORO'.

Parrsboro', Cumberland County, is on the north side of the Basin of Minas, and near the mouth of the Partridge Island River.

During the year the outer end of the pier was sheathed with hardwood plank, and the structure placed in a proper state of repair.

PICTOU.

The "St. Lawrence" was engaged during the year in dredging at the railway and market wharves in this harbour, and in the Middle River, opposite the Black Diamond Wharf.

PORT HOOD.

The shiretown of the County of Inverness, is on the west coast of Cape Breton, 20 miles north of the northern entrance to the Gut of Canso.

Slight repairs were made to the outer end of the wharf at this place.

Between the 15th and 30th September, the "St. Lawrence" dredged off the end of the wharf, giving a depth of 12 feet at low water.

PORT MOUTON.

Port Mouton, Queen's County, is situated about 15 miles west of Liverpool. The top of the old mooring pier was removed and re-built with new materials.

SALMON RIVER.

Salmon River, Digby County, is about 3 miles south of Cape St. Mary.

The harbour of Salmon River is formed by a breakwater and loading wharf on the south side of the mouth of the river.

During the year 182 feet of the river face of the southern pier was entirely re-built.

SAULNIERVILLE.

Saulnierville, Digby County, is situated on the southern shore of St. Mary's Bay, about 14 miles west of Weymouth.

The landing pier at this place received some necessary repairs.

SOUTH-WEST, PORT MOUTON.

In Queen's County, 10 miles from Liverpool.

A breakwater 165 feet in length, with a boat landing for the convenience of fishermen, has been built.

SPENCER'S ISLAND.

Spencer's Island, Cumberland County, is situated at the western end of Greville Bay, in the Minas Channel, Bay of Fundy.

The amount appropriated is being expended in the construction of a public wharf 300 feet in length, and at the end of the fiscal year the work was well under way.

SUMMERVILLE.

Summerville, Queen's County, is situated on the north side of Mouton Bay, about 12 miles west of Liverpool.

The breakwater at this place is much exposed to southerly storms and has been much damaged by the sea worm.

During the year some general necessary repairs were made to the structure.

TANCOOK ISLAND.

Great Tancook Island, Lunenburg County, is in Mahone Bay, about 8 miles south from the town of Chester.

The pier constructed at the joint expense of the Dominion and Provincial Governments in 1873 having become much out of repair received extensive repairs to the outer end and L.

TROUT COVE.

Trout Cove, Digby County, is on the south shore of the Bay of Fundy, nearly mid-way between Digby Gut and Petite Passage.

During the fiscal year 140 feet of the inner portion of the seaward face of the work was rebuilt from the beach to the top of the "break," part of the flooring was renewed and other repairs executed.

WALLACE.

Wallace is in Cumberland County, 16 miles from Wentworth.

The "Cape Breton" dredged from the 3rd October to 5th November, 1887, in improving the channel for the ferry, and in removing obstructions off the "Union Freestone" and "Wallace Grey Stone" Companies' wharves.

WESTERN HEAD.

Western Head, Queen's County, is situate on the southern entrance to Liverpool Bay, about 4 miles from Liverpool.

During the year the construction of a stone breakwater for the protection of fishing vessels was commenced, and the work was still in progress on the 30th June, 1888.

WILLOW COVE.

Willow Cove, Queen's County, is at the head of Port Mouton Harbour.

A breakwater 140 feet in length was built during the year at this place for the protection of fishing boats, especially of the larger class, as the anchorage is soft and bad.

YARMOUTH.

Yarmouth is the shiretown of the county of that name.

During the whole of the fiscal year 1887-88, the dredge "Canada" was engaged in improving the channel in this harbour.

NEW BRUNSWICK.

ANDERSON'S HOLLOW.

Anderson's Hollow, Albert County, is on the eastern side of Salisbury Bay which lies between Cape Enragé and Matthew's Head, on the northern side of the Chignecto Channel, the north-east arm of the Bay of Fundy.

During the year a contract was entered into for the construction of 260 feet of cribwork to connect the isolated breakwater—built in 1878-79—with the shore, and at the 30th June last the work was well under way.

BAY VERTE.

Bay Verte is on the eastern coast of New Brunswick, at the boundary between that province and Nova Scotia.

On the 28th November, 1887, a contract was entered into for the construction of a ballast wharf 100 feet long by 40 feet wide near the head of the bay, and the work was satisfactorily completed at the end of the fiscal year.

BELLIVEAU.

Belliveau, Westmorland County, is on the eastern shore of the Petitcodiac River, about 18 miles below the town of Moncton.

The necessity for a public wharf at this place having been brought to the notice of the Department, a contract has been entered into for the construction of one, 233 feet long, 24 feet wide on the top, and at the close of the fiscal year about one-third had been built.

CAPE TORMENTINE.

Cape Tormentine is on the New Brunswick coast of the Strait of Northumberland, and opposite Cape Traverse, Prince Edward Island.

Owing to the failure of the contractors to prosecute the work, fresh tenders were called for, and a contract has been entered into for the completion of the work projected.

CLIFTON.

Clifton, Gloucester County, is on the southern shore of the Baie des Chaleurs, about 18 miles eastward from the town of Bathurst.

The following repairs were executed on the breakwater at this place: two breaches in the face at the north-east and north-west corners were made good, bal-

[1888]

65

last replaced, faces sheathed on the outside, hardwood sheathing placed on a portion of the eastern face, and 23 new fenders on inner end of eastern face.

COCAGNE.

The harbour of Cocagne, Kent County, is on the south-west coast of the Strait of Northumberland, about 10 miles north of Shediac Harbour.

The wharf built by the Department in 1881-82 having settled irregularly was levelled up and widened over a length of 100 feet.

DALHOUSIE.

At the head of the Baie des Chaleurs and a short distance below the mouth of the River Restigouche.

The ballast wharf, 300 feet in length, referred to in the report of last year, was completed on the 24th October, 1887.

GRANDE ANSE.

Grande Anse, Gloucester County, is a small indentation in the southern shore of the Bay des Chaleurs, about midway between the harbours of Bathurst and Shippegan.

Materials have been procured for continuing the reconstruction of the top of the breakwater which was carried away in January, 1885.

PARTRIDGE ISLAND.

This island lies directly off the entrance to the harbour of St. John.

Many years ago two small piers were built to facilitate the landing of supplies for the lighthouse and other buildings of the Marine Department.

The eastern of these piers was almost destroyed during a storm in February, 1887. The wreckage, which was swept into the harbour was removed, and at the close of the fiscal year the work of rebuilding the eastern pier was nearly completed.

RICHIBUCTO.

Is situated on the south-west shore of the northern entrance into the Strait of Northumberland, and about 40 miles north of Shediac Harbour.

The amount appropriated was expended in close piling the outer end of the breakwater, in placing brush and stone where required, and in constructing about 200 feet of brush, pile and stone dam along the beach.

Between 13th July and 7th September, 1887, the dredge "St. Lawrence" was engaged in deepening to 14 feet at low water, and in otherwise improving the north channel, one of the outer entrances to the harbour.

RIVER MADAWASKA.

The Madawaska is a tributary of, and empties into, the River St. John, at Edmundston.

The amount appropriated for the past fiscal year was expended on the improvement of the tow path and the removal of obstructions in the river.

RIVER ST. JOHN.

Between St. John and Fredericton 78 snags were removed from different parts of the river.

From 1st to 18th July, and from 20th September to 15th October, the dredge "New Dominion" was engaged in opening a channel to the public wharf at the head of Belleisle Bay, King's County, at which latter date the work was completed.

At Grand Lake, Queen's County, the same dredge was employed in improving the channel through the flats, working from the 18th July to the 10th September.

Between Spring Hill and Bear Island, sand bars and boulders were removed.

Sand bars and boulders which obstructed the channel, were removed between Bear Island and Meductic Falls.

At Meductic Falls blasting operations were carried on, sand bars and boulders were removed from the channel between the Falls and Eel River, and the tow path was repaired.

The tow path was repaired, and obstructions were removed between Eel River and River des Chutes.

Between Aroostook and Salmon River repairs were made to the tow path.

Tow path repaired and obstructions removed between Salmon River and Grand Falls.

At Grand Falls obstructions were removed, and the shear dam on the east side of the river was repaired.

From the Grand Falls to the River St. Francis repairs were made to bridges on the tow path, and the channel was cleared of boulders and sand bars.

At Edmondston the breakwater was planked.

On the River Tobique, below the Forks, the tow path was repaired, and ledges, boulders and other obstructions were removed from the channel.

ST. JOHN HARBOUR.

The protection work at the inner end of the breakwater at Negro Point and around the foot of the cliff on which stands Fort Dufferin, again received much damage during the winter of 1886-87, and on the 24th November last a contract was entered into for the reconstruction of that part of the work which had been carried away, and for strengthening and repairing the other portions of the retaining wall, and at the end of the fiscal year the work was about half completed.

UPPER SALMON RIVER.

This river empties into Salisbury Bay, at the Village of Alma, Albert County, at the head of the Bay of Fundy.

The further length of breakwater, referred to in the report of last year was completed and accepted in August, 1887, and the inner end of that portion of the breakwater built in 1883, which had been undermined by the sea, was secured by close sheathing and deposits of brush and stone on either side.

WILSON'S BEACH, CAMPOBELLO.

On the western side of Campobello Island, near its northern end.

During the year the breakwater was raised, close sheathed and repaired generally.

QEEBEC.

BERTHIER (EN HAUT)

On the north shore of the St. Lawrence, 45 miles north-east of Montreal, and opposite Sorel.

The ice pier constructed in 1886 having been found too low, was raised 3 feet.

CAP DE LA MADELEINE.

Cap de la Madeleine is in the County of Champlain, on the north shore of the St. Lawrence, about two miles below Three Rivers.

During the year a pier, 60 feet by 24 feet at bottom, and 52½ feet by 23 feet on top, with an approach 200 feet in length, was built at this place. There is a depth of 8 feet of water at its head.

CARLETON

Is in Bonaventure County, on the south shore of the Bay des Chaleurs, 36 miles from Campbellton and 5 miles from Dalhousie, N. B.

A waiting room and freight shed, 28 by 18 feet, was constructed on the wharf.

[1888]

67

COTEAU DU LAC.

Coteau du Lac, or St. Jacques de Soulanges, is situated on the north side of the River St. Lawrence, 24 miles above Montreal.

The wharf under construction at this place consists of a block 100 feet long by 20 feet in width, with 6 feet of water at its outer side, and an approach 110 feet in length.

At the close of the fiscal year the work was more than half completed.

ETANG DU NORD.

At the western end of Grindstone Island, one of the Magdalen Group, in the Gulf of St. Lawrence.

The breakwater referred to in the report of last year is now completed; it is 500 feet in length, with a width on top of 32 feet.

GRAND RIVER.

This river flows into the Baie des Chaleurs, 16 miles from Percé.

The original mouth of the river having become closed with sand, and a new one having formed, steps were taken to close this new channel, and the work was in progress at the close of the fiscal year.

ISLE AUX COUDRES.

In the County of Charlevoix, 12 miles from Baie St. Paul.

The face timbers and fenders which had been broken by the ice were renewed.

ISLE PERROT.

The wharf at Isle Perrot is situated on the south side of the island, on Lake St. Louis, one and a half miles below the church.

It consists of a block 130 feet in length by 30 feet in width, with a depth of 8 feet of water, and is 580 feet from the shore. It was built by contract and completed during the fiscal year.

ISLE VERTE.

Isle Verte is the *chef lieu* of the County of Témiscouata.

The construction of a block 50 feet by 40 feet and 20 feet high was commenced at this place, but at the close of the fiscal year was not completed.

LAPRAIRIE.

Laprairie, the *chef lieu* of the County of Laprairie, is on the south shore of the St. Lawrence, 7 miles above the city of Montreal.

To protect the town from disastrous floods, an earth embankment 1,600 feet in length was constructed at the upper end of the town. It proved most successful during the floods of last winter.

Along the shore, east of the ice pier, a cribwork retaining wall was built on a length of 480 feet. This wall is 10 feet in height and is filled principally with stone.

At the commencement of the fiscal year the dredge "Queen" was engaged in opening a new channel from the main channel in the St. Lawrence to the public wharf, and continued at this work until 1st September.

LES EBOULEMENTS.

On the north shore of the St. Lawrence, 69 miles below Quebec.

The pier at this place received some small repairs.

L'ISLET.

On the south shore of the St. Lawrence, 63 miles below Quebec.

Repairs were made to the roadway and slip of this pier.

LONGUEUIL.

Longueuil is on the south shore of the St. Lawrence, nearly opposite the city of Montreal.

A contract was entered into with Messrs. Burns & Smith for the construction of a wharf 430 feet in length, commencing 670 feet from the shore, and the same was satisfactorily completed during the fiscal year.

NEW CARLISLE.

In Bonaventure County, on the north shore of Baie des Chaleurs, about 65 miles east of Campbellton, N.B.

The wharf at this place received sundry necessary repairs.

NEWPORT RIVER.

Empties into the Baie des Chaleurs, 25 miles to the westward of Percé. Materials have been purchased for an addition to the pier protection works.

NICOLET.

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

During the past fiscal year a further length of 630 feet of pile protection has been driven.

MURRAY BAY.

In the County of Charlevoix, on the north shore of the St. Lawrence, 84 miles below Quebec.

Some slight necessary repairs were made to the wharf.

PAPINEAUVILLE.

On the River Ottawa, 41 miles below the City of Ottawa.

The "Nipissing" commenced opening a channel from the Ottawa into Papi-neauville Bay, on 23rd May last, and at the close of the fiscal year good progress had been made.

PERCÉ.

The chief town of the County of Gaspé.

A contract has been entered into for the construction of a wharf at this place, and, at the close of the fiscal year, the work was in progress.

PORT DANIEL.

In the County of Bonaventure, on Baie des Chaleurs, and about 50 miles from Percé.

A contract was entered into for the construction of a wharf, 350 feet in length, 20 feet wide for the first 200 feet, 30 feet wide for the next 100 feet, with a block 50 feet square at the outer end, and, at the close of the fiscal year, the work was nearly completed.

RIVER CABANO.

This river flows into Lake Témiscouata.

Fifteen miles of the river were cleared of boulders and timber which obstructed the navigation.

RIVER CHATEAUGUAY.

This river empties into the St. Lawrence, on its southern shore, some miles above Caughnawaga.

During the year the dredges "Queen" and "Nipissing" operated in the upper arm of this river, making a channel with a depth of 8 feet. Many large boulders were encountered, which required to be blasted before they could be removed.

RIVER DU LIÈVRE.

This river empties into the Ottawa, 18 miles below the city of Ottawa.

In December, 1886, a contract was entered into for the construction of a lock and dam at the Little Rapids, 12 miles above the village of Buckingham, and at the close of the fiscal year the work was well in hand.

RIVER DU LOUP (EN BAS)

On the south shore of the St. Lawrence, 114 miles below Quebec,

A quantity of sand, gravel and boulders were removed by hand from the inside channel.

RIVER DU LOUP (EN HAUT), LOUISEVILLE.

This river flows through the County of Maskinongé and empties into the St. Lawrence, in Lake St. Peter, 20 miles above Three Rivers.

Dredging through the shoal at the mouth of the river, and referred to in the report of last year, was continued during the fiscal year, and 17,180 cubic yards of mud were removed.

RIVER GATINEAU.

This river empties into the Ottawa, on its northern side, below the city of Ottawa.

The "Nipissing" was engaged during September and October in dredging a channel through the obstructions about one-third of a mile below the Canadian Pacific Railway bridge, and through a shoal off the ferry wharf at Gatineau Point.

RIVER MADAWASKA.

This river has its source in Lake Témiscouata, and after a course of 30 miles falls into the St. John at Edmundston, N.B.

Rocks and boulders obstructing the navigation were removed over about a mile of the river.

RIVIÈRE OUELLE.

Empties into the St. Lawrence on its southern side, 75 miles below Quebec.

The pier, which is situated at Point aux Orignaux, and was considerably damaged by the ice in the winter of 1887, was repaired.

RIVER RICHELIEU, AT SOREL.

The Richelieu flows into the St. Lawrence, on its southern shore, at the head of Lake St. Peter, 45 miles below Montreal.

In order to afford protection to the town of Sorel during the run of ice in the spring, two ice piers were built during the fiscal year, one being situated 3,000 feet above the Richelieu Company's wharf in 19 feet of water, and the other 950 feet above the first in 22 feet of water.

RIVER RICHELIEU.

During the past fiscal year the work of straightening and deepening the crooked channel between the island and the western shore at St. Antoine was prosecuted by the departmental dredges "Nipissing" and "Queen."

RIVIÈRE STE. ANNE DE BEAUPRÉ.

This river empties into the St. Lawrence, on the northern side, in the Parish of Ste. Anne, Montmorency County.

The improvements undertaken to facilitate the descent of timber on this river, consisting in the removal of rocks and the construction of dams, were completed during the fiscal year.

RIVER ST. FRANCIS.

The St. Francis empties into Lake St. Peter, 3 miles below the mouth of the River Yamaska.

Dredging through the shoal at the mouth of the river as well as through one 2 miles above Tourville Mills, and through another at the "Great Bend," $\frac{1}{4}$ of a mile below the mills, was continued during the year ended 30th June, 1888, 27,200 cubic yards of material having been removed.

RIVER ST. LOUIS.

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

The dredge "St. Louis" was placed at work early in July, 1887, on the "feeder" or cut between the St. Lawrence and River St. Louis, finishing the work on the 16th October.

RIVER YAMASKA.

This river flows from the south into Lake St. Peter.

During the year the following works were executed; the ice breaker at the upper end of the lock was repaired; the old shed was put in good order; brush and stone were placed on both sides of the lock wall and along the wing walls to prevent scour during freshets, and some gravel was deposited in front of the dam near the abutments.

ST. ALPHONSE DE BAGOTVILLE.

At the head of Ha! Ha! Bay, River Saguenay, about 66 miles above its mouth. Some slight repairs were made to the flooring of the wharf.

STE. ANNE DE LA PERADE.

The River Ste. Anne flows from the north and empties into the St. Lawrence, 23 miles below Three Rivers.

Between the 29th August and 10th September, 1887, a dredge was engaged in making a channel through the shoal at the mouth of the river to give a depth of 6 feet at low tide. Work was resumed on the 6th June, 1888, and was still in progress at the close of the fiscal year, when 9,685 cubic yards of sand, clay and gravel had been removed.

STE. ANNE DU SAGUENAY.

In the County of Chicoutimi, on the River Saguenay, opposite Chicoutimi. The timber required for the proposed wharf at this place has been obtained.

STE. ANNE DE SOREL.

In the County of Richelieu, and about 3 miles below Sorel, on the south shore of the St. Lawrence.

Another ice pier was built during the year on the property of Bruno Peloquin, and pier No. 3 was raised 3 feet 4 inches.

ST. FRANCOIS D'ORLÉANS.

At the extreme end of the Island of Orleans.

A landing slip was constructed, cap timbers and fenders placed where required, and other necessary repairs were effected.

STÉ. IRENÉE.

In the County of Charlevoix, on the north shore of the St. Lawrence, 78 miles below Quebec.

The block at this place was raised 19 feet.

ST. LAURENT.

On the Island of Orleans, 14 miles north-east of Quebec.

The roadway of this wharf was repaired, the slip completed, and repairs made to the face timbers and superstructure.

ST. MICHEL.

On the south shore of the St. Lawrence, 16 miles below Quebec.

Extensive repairs were made to the wharf at this place.

TÉMISCOUATA ROAD.

This road extends from River du Loup (*en bas*) to the boundary between the Provinces of Quebec and New Brunswick, a distance of 67 miles.

Some necessary repairs were made to the roadway, culverts and bridges.

THREE RIVERS.

The City of Three Rivers is at the mouth of the River St. Maurice which empties into the St. Lawrence on its northern side, 82 miles below Montreal.

An ice pier, 30 by 26 feet at the base and 17 feet 2 inches in height, was built during the year on the foreshore of the St. Lawrence at a point 1,600 feet above Dean's wharf.

VAUDREUIL.

In the County of Vaudreuil, on the River Ottawa, about 25 miles above Montreal.

During the fiscal year a wharf 324 feet in length, 20 feet in width, the outer block being 30 by 20 feet, was constructed at this place.

ONTARIO.

BELLEVILLE.

Is situated at the mouth of the River Moira, which flows into the Bay of Quinté, 43 miles west of Kingston.

The dredging of a channel to form an outlet for the Moira during freshets, referred to in the report of last year, was resumed by the contractor in August, 1887, and was still in progress at the close of the fiscal year.

Owing to the shallowness of the water and the hard nature of the material to be removed—rock—the work did not progress as rapidly as it otherwise would.

BRIGHTON.

Brighton is situated on Presqu'île Harbour, Lake Ontario, 22 miles from Belleville.

Between the 14th and 30th June, the dredge "Ontario" was engaged in deepening the channel off the wharves at this place to a depth of 12 feet.

COBOURG

On Lake Ontario, 96 miles west from Kingston.

On 24th March last a contract was entered into for re-building a portion of the western pier, and at the close of the year the work was well in hand.

The Departmental dredge "Ontario" was engaged during May and June in cleaning up the inner harbour to 13 feet.

GODERICH.

This harbour is on the east coast of Lake Huron, 68 miles above the entrance to the St. Clair River.

During the year the dredge "Challenge" was engaged in opening a passage to 18 feet depth through the shoal that forms off the entrance to the harbour, and to deepening to 14 feet alongside of the wharves in the harbour. Material was also excavated in the channel between the piers.

KINCARDINE.

At the mouth of the River Penetangore, which empties into Lake Huron, 31 miles north of Goderich.

To prevent the north face of the southern pier from falling into the channel, the work of driving sheet piling along this face was begun in August, 1887, and at the close of the fiscal year was still in progress.

The "Challenge" dredged to a depth of 16 feet at low water between the piers to admit the large lake steamers, and removed an accumulation of deposit in the basin, the work taking from the 29th August to the 27th October to accomplish.

KINGSTON.

The work of removing Point Frederick Shoal in Kingston Harbour was resumed on the 1st August, 1887, and carried on until the 29th October, when it closed for the season. Operations were again commenced on 29th May, 1888, and during the fiscal year ended 30th June 1888—at which date work was still in progress—2,818 cubic yards of rock were removed.

KINGSVILLE.

On Lake Erie, about 25 miles east from the mouth of the River Detroit.

The work done at this harbour during the fiscal year ended 30th June, 1888, consisted in rebuilding a portion of the superstructure of the western pier, and in placing stone rip-rap on the west side of the western pier to prevent the structure being undermined by the action of the water.

LITTLE CURRENT.

Little Current is at the passage between the Cloche and Great Manitoulin Islands, and on the direct route to Lake Superior for vessels taking the north channel of Lake Huron and Georgian Bay.

The work of increasing the width of the channel, referred to in the report of last year, was continued until the close of the working season of 1887. Although this difficult and at times dangerous channel, has been much improved, further work is required to make it safe for vessels passing up and down in any wind.

M'GREGOR'S CREEK.

Empties into the River Thames, at the Town of Chatham, in the County of Kent.

The contract for the construction of 300 feet of pile protection work, referred to in the report of last year, was completed in September, 1887, and the work taken off the contractor's hands.

MIDLAND.

Midland, Simcoe County, is the terminus of the Midland Division of the Grand Trunk Railway on Georgian Bay.

The wharfing, referred to in the report of last year as having been commenced, was completed and taken off the contractor's hands in February last.

NEWCASTLE.

Is on Lake Ontario, 47 miles east from Toronto.

The dredge "Ontario" worked for and at the expense of the Harbour Commissioners of this place between the 26th September and 23rd October, obtaining a depth of 14 feet.

OAKVILLE.

On Lake Ontario, in the County of Halton, 22 miles west of Toronto, and 18 miles east of Hamilton.

The work of rebuilding the outer 360 feet of the eastern pier, commenced during the previous fiscal year, was satisfactorily completed on the 12th October, 1887, and taken off the contractor's hands.

Connection was also made between the old portion of the eastern pier and the new work, and the channel between the east and west piers was dredged to a depth of 12 feet at low water.

PORT ALBERT.

Is on the eastern shore of Lake Huron, and about 9 miles north of Goderich.

The works at this place consist in rebuilding the upper part of the north pier, sheet piling 150 feet of the south face of the south pier and 150 feet of the east end of the north pier, and at the close of the fiscal year were well under way and nearing completion.

PORT ARTHUR.

Port Arthur, formerly Prince Arthur's Landing, is on Thunder Bay, Lake Superior.

The work of extending the breakwater 1,600 feet in an eastwardly direction, under contract, and which was in progress at the close of the last fiscal year, has been continued, is still in hand and is nearing completion.

A dredge was engaged for a short time in removing several lumps in the harbour between the breakwater and the wharves, and in deepening the channel at the elevator dock.

PORT DARLINGTON.

On Lake Ontario, about 42 miles east of Toronto.

The "Ontario" dredged between the 27th August and 24th September for and on account of the Harbour Commissioners of this place, giving a depth of 13 feet in the inner part of the harbour and 14 feet between the piers.

PORT ELGIN.

Port Elgin is in the County of Bruce, 24 miles north of Kincardine, on Lake Huron.

The work of constructing a groyne, extending from the present landing pier for a distance of 300 feet, and referred to in the report of last year, was completed.

Dredging was also performed over a portion of the harbour to give easier access to the landing pier.

PORTAGE DU FORT BRIDGE.

This bridge crosses the Ottawa at Portage du Fort, 60 miles above the City of Ottawa.

During the year the approach to the bridge on the Ontario side was widened to 20 feet, and the whole of the superstructure received two coats of paint. The work is now completed.

PORT HOPE.

Port Hope is on the north shore of Lake Ontario 8 miles to the westward of Cobourg.

During the fiscal year 126 feet of the superstructure of the east pier, between the two lights, and 370 feet of the superstructure of the railway wharf were repaired.

A bar, which had formed off the entrance to the harbour, was removed by the Government dredge "Ontario."

PORTSMOUTH.

Portsmouth is situated on the bay of that name, two miles west of Kingston.

The pier at this place proved on examination to be in a most dilapidated state, and to render it serviceable it required renewal over its whole length and to a depth of 7 feet and over of its original elevation.

At the close of the fiscal year 300 feet of work had been nearly completed, and the work was well in hand.

RIDEAU RIVER, NORTH BRANCH.

The "St. Louis" was put to work on 5th of June, 1888, in deepening the north branch of the Rideau to 7 feet from the canal to Kemptville, and at the close of the fiscal year was still engaged on that work.

RIVIÈRE AUX PÊCHES.

This river flows through the County of Essex and empties into Lake St. Clair.

A further length of 400 feet of pile protection work was built at the mouth of this river during the fiscal year.

RIVER KAMINISTIQUIA.

This river empties into Thunder Bay to the westward of Port Arthur.

During the working season further dredging was done in this river to improve the navigation and render it available for the largest class of vessels navigating these waters. The channel through the bar at the mouth of the river was also widened.

RIVER OTTAWA—NARROWS ABOVE PEMBROKE.

Dredging on the shoals in this portion of the river was resumed on 1st of August and continued till 28th of October, during which time 1,560 cubic yards of rock, boulders and gravel were removed, and 29 buoys placed in the channel.

RIVER OTTAWA—RETAINING WALL, PARLIAMENT HILL.

A retaining wall of cribwork, 310 feet in length and 23 feet in height was built at the foot of the hill between the Rideau Canal and the Dynamo House.

RONDEAU.

Rondeau Harbour, Kent County, is situated at Pointe aux Pins, on the north shore of Lake Erie, 140 miles above Port Colborne, the entrance to the Welland Canal.

Some slight repairs were made to the east and west piers and to the piling on the eastern side of the east pier.

SAUGEEN RIVER PIER.

This pier is at the mouth of the Saugeen River, which flows into Lake Huron at the village of Southampton.

The work of re-building the superstructure of the old pier over a length of 544 feet, and the construction of an additional crib 100 feet long, was completed in July, 1887, and the work taken off the contractor's hands.

SOUTHAMPTON.

In the County of Bruce, on Lake Huron, 143 miles above Sarnia.

The outer 200 feet of the landing pier was rebuilt during the fiscal year, and a portion of the eastern breakwater was filled with stone and replanked.

SOUTH NATION RIVER.

This river takes its rise in the Township of Matilda, County of Dundas, and, after an irregular course of about 100 miles, flows into the Ottawa at Plantagenet.

About 12 miles below Casselman a rocky shoal 670 feet in length is found, otherwise the river would be navigable from Casselman to Plantagenet, a distance of 36 miles.

To render this stretch navigable, operations were commenced during the summer of 1887 in excavating a channel through this shoal, and during the fiscal year a depth of 6 feet at low water was obtained over a length of 170 feet, leaving 500 feet yet to be improved.

The dredge "Nipissing" worked from the 2nd to 19th November in removing a deposit of sand which completely blocked the entrance to the river.

MANITOBA.

THE RED RIVER.

The Departmental dredge worked during the fiscal year in the West Slough, near West Selkirk, in the channel at the mouth of the river, at Salimony's channel, about 2½ miles from the mouth and at West Selkirk.

THE WHITE MUD RIVER.

The White Mud River empties into Lake Manitoba, 9 miles north of Westbourne. The "Priestman" dredge belonging to the Department operated during the year on the shoal, at the mouth of the river, and in the river itself between Totogan and McArthur's Landing.

NORTH-WEST TERRITORIES.

RIVER SASKATCHEWAN.

The work of removing boulders and sandbars from the North Branch was continued during the past fiscal year.

BRITISH COLUMBIA.

COWICHAN RIVER.

The work of straightening and improving the channel of this river between the Railway Bridge and the Indian Village Bridge was continued during the past fiscal year.

ESQUIMALT GRAVING DOCK.

This dock was opened in July, 1887, by the entrance of H.M.S. "Cormorant," which was followed by H.M.S. "Caroline," and during the year four other vessels were docked and repaired.

The dock is in good order and has been supplied with electric light apparatus, and an ample supply of fresh water.

FRASER RIVER.

The work of improving the north channel across the sand banks at the mouth of the river was resumed on the 20th September, 1887.

During the season a further length of 1,900 feet of submerged dam was sunk, completely blocking the north end of the south channel. This work was undertaken with a view of forcing the full current of the river against the middle ground in the north channel, in order to cut a channel through that obstruction. These anticipations have, however, been only partially realized, and further works are required to gain the end sought.

From the mouth of the river upwards for a distance of 90 miles, the snag boat "Samson" removed 410 snags from the channel.

NICOL ROCK, NANAIMO HARBOUR.

Work was commenced in November, 1887, on the removal of the "Nicol Rock," which is a dangerous obstruction in the harbour, and at the close of the fiscal year the work was well in hand.

NICOMECKEL RIVER.

The "cut off" excavated during 1886-87 at the big bend of the river has been enlarged. It is now 24 feet wide on top by about 10½ feet deep, affording increased facilities for navigation.

SERPENTINE RIVER.

The improvement of the water way of this river consisted in the excavation of a ditch or cut off between two points on the river, about one and a half miles long, thus not only relieving adjacent lands of surplus water, but affording settlers an outlet for their produce.

SOMAS RIVER.

Snags and other obstructions were removed from the mouth of the river to the steamboat landing.

VICTORIA HARBOUR.

The Dredge "Pacific" was engaged from the beginning of the fiscal year 1887-88 in removing clay and boulders surrounding the site of the Dredger Rock, work being stopped on the 24th December.

On the 23rd February, 1888 the dredge commenced work off Shoal Point, and continued there till 9th April.

SURVEYS AND EXAMINATIONS.

During the year surveys and examinations were made at the undermentioned localities; and—with some exceptions—plans, reports and estimates have been submitted:—

Chapel Pier,	King's Co.,	P. E. I.	Bridgeport	Cape Breton Co.	N.S.
Georgetown Pier	do	do	Grand Mira River	do	do
Murray Harbour	do	do	Main à Dieu	do	do
North Cardigan	do	do	Brulé,	Colchester Co.	do
St. Mary's Bay Pier	do	do	Parrsboro',	Cumberland Co.	do
Souris	do	do	Pugwash	do	do
Cascumpec,	Prince Co.	do	South Joggins	do	do
Miminigash (Big)	do	do	Beaver River,	Digby Co.	do
do (Little)	do	do	Church Point	do	do
Belfast Pier,	Queen's Co.	do	Digby	do	do
China Point Pier	do	do	Grosses Coques	do	do
Nine Mile Creek	do	do	White's Cove	do	do
Victoria Pier	do	do	Salmon River,	Halifax Co.	do
Delap's Cove,	Annapolis Co.,	N. S.	Sheet Harbour	do	do
Hampton	do	do	Maitland,	Hants Co.	do
Parker's Cove	do	do	Noel	do	do
Port Lorne	do	do	Summerville	do	do
Livingstone Cove,	Antigonish Co.	do	Cheticamp,	Inverness Co.	do
Big Pond,	Cape Breton Co.	do	Low Point	do	do

McIver's Pond	Inverness Co.	N. S.	Lake St. John,	Chicoutimi Co.	N. S.
Port Hood	do	do	St. Fulgence	do	do
Whycocomagh	do	do	Grande Rivière,	Gaspé Co.	do
do (Indian reserve)	do	do	Îlot de Pabos	do	do
Morden,	King's Co.	do	Percé	do	do
Point Batty Island,	Pictou Co.	do	Pointe St. Pierre	do	do
West Arichat,	Richmond Co.	do	Ile Bizard,	Jacques Cartier Co.	do
Bay St. Lawrence,	Victoria Co.	do	River Jesus,	Laval Co.	do
French River	do	do	Grosse Isle,	Montmagny Co.	do
Little Narrows	do	do	St. Laurent,	Montmorency Co.	do
Neil's Harbour	do	do	Papineauville,	Ottawa Co.	do
Wreck Cove,	do	do	River Richelieu,	Richelieu Co.	do
Green Cove,	Yarmouth Co.	do	Georgeville,	Stanstead Co.	do
Edgett's Landing,	Albert Co.,	N. B.	River St. Maurice,	St. Maurice Co.	do
Gray's Island	do	do	Cacouna,	Temiscouata Co.	do
Stony Creek	do	do	Ile Verte	do	do
Clifton,	Gloucester Co.	do	Notre Dame du Portage,	do	do
Grande Anse	do	do	Rivière Ile Verte	do	do
Mizzonette Point	do	do	Baie de la Vallière,	Yamaska Co.	do
Richibucto,	Kent Co.	do	River Kaminstiquia,	Algoma Co.,	Ont.
St. Louis	do	do	Port Arthur	do	do
Grey's Point,	King's Co.	do	Port Elgin,	Bruce Co.	do
Hampton	do	do	Rideau River (North		
Water's Wharf,	King's Co.,	N. B.	Branch),	Grenville Co.	do
Madawaska River,	Madawaska Co.	do	Owen Sound,	Grey Co.	do
Fairville,	St. John Co.	do	Oakville,	Halton Co.	do
St. John Breakwater	do	do	Bayfield,	Huron Co.	do
St. John Harbour	do	do	Goderich	do	do
Moncton,	Westmorland Co.	do	Pembroke,	Renfrew Co.	do
Pointe du Chêne	do	do	Gollingwood,	Simcoe Co.	do
Lake St. Francis and	{ Beauharnois and	Que.	Mililand	do	do
River St. Louis,	Huntingdon Cos. }		Toronto,	York Co.	do
River St. Louis,	Beauharnois Co.	do	Burlington Channel,	Lake Ontario.	
Little Bonaventure,	Bonaventure Co.	do	Union Suspension		
New Carlisle	do	do	Bridge,	River Ottawa.	
Paspebiac	do	do	Belly River,	N. W. T.	
Longue Pointe and			Medicine Hat	do	
Boucherville,	Chambly Co.	do	Sheep Creek	do	
St. Lambert	do	do	Bigg's Portage,	B. C.	
Bay St. Paul,	Charlevoix Co.	do	Columbia River	do	
Pointe au Persil	do	do	Harrison River	do	
Rivière Noire	do	do	Vancouver	do	

DREDGING.

THE "ST. LAWRENCE."

After completion of repairs this dredge arrived at Richibucto, N.B., on the 13th July, 1887, and almost immediately commenced to work in improving the North Channel, one of the outer entrances to the harbour, and was engaged until the 7th September, up to which date work had been done over a length of 360 feet, which had been widened to 150 feet, and to a depth of 14 feet at low water; a quantity of 9,362 cubic yards of sand having been removed.

Between the 15th and 30th of September dredging was carried on off the end of the wharf at Port Hood, Inverness County, N. S., when a depth of 12 feet at low water was obtained, and 2,800 cubic yards of sand were removed.

On the 3rd October work was commenced in the Middle River, Pictou County, N. S., opposite the Black Diamond Wharf, and continued until the 18th, when it was brought to a close, a cut 360 feet in length, 70 feet in width and to a depth of 22 feet having been made, and 7,000 cubic yards of mud and oyster shells having been removed.

During the winter the boiler was lifted, stayed and thoroughly repaired, and several repairs were made to the vessel and machinery.

On the 14th May work was for the season began at the railway wharf, Pictou Harbour, and was continued until the 19th when a depth of 17 feet over an area of 900 square feet had been obtained by the removal of 2,275 cubic yards of mud and clay.

At the Market Wharf this dredge worked between the 20th of May and the 22nd of June, in making a channel from the main channel in the harbour towards the wharf, a distance of 810 feet, leaving a width of 60 feet and a depth of 15 feet, where before there existed but 7 feet. The material removed was clay, and the quantity amounted to 14,700 cubic yards.

At the close of the fiscal year the dredge was being placed in order to sail for Little Glace Bay, Cape Breton County, N. S.

The total quantity removed amounted to 36,137 cubic yards, at a cost of 30.55 cents per cubic yard.

The sum of \$34 90 was received from the sale of a quantity of old materials and a boat, and placed to the credit of the Hon. Receiver General.

THE "CANADA."

At the close of the fiscal year the "Canada" was engaged in improving the channel in the harbour of Yarmouth, N. S., and that work was continued until the 4th of November, when operations ceased and the dredge was placed in winter quarters.

The usual necessary repairs to the vessel and machinery having been effected, dredging in the channel was resumed early in May, 1888, and continued until the 30th June, up to which date there had been removed during the year 31,050 cubic yards of clay, at a cost of 30.10 cents per cubic yard.

From the sale of old rope the sum of \$4 60 was received and placed to the credit of the Receiver General.

THE "NEW DOMINION."

At the close of the previous fiscal year this dredge was engaged in opening a channel to the public wharf at the head of Belleisle Bay, King's County, N. B., and continued on that work until the 18th July, when it was sent to the Grand Lake, Queen's County, and resumed operations in improving the channel through the flats at that place, remaining until 10th September, having removed 21,910 cubic yards of clay, sawdust, &c.

After repairs were effected dredging was resumed on the 20th September at Belleisle, and on the 15th October the channel to the wharf was completed, 15,205 cubic yards of sand and clay having been removed.

This dredge wintered at St. John, N. B., where necessary repairs were made, and on the 18th June, 1888, it was taken to Hampton, King's County, to operate in deepening over the shoal in the Kennebecassis, below the village and up to the 30th June 3,675 cubic yards of fine sand had been removed.

The total quantity of materials removed during the year amounted to 40,790 cubic yards, which was done at a cost of 15.47 cents per cubic yard.

The sum of \$10 60 was received from the sale of old materials and placed to the credit of the Receiver General.

THE "CAPE BRETON."

This dredge did not commence work until the 3rd October, 1887, after its arrival at Wallace, Cumberland County, N. S., where it remained until the 5th November and improved the channel of the ferry at that place, and removed obstructions off the wharves of the "Union Freestone" and "Wallace Greystone" Companies, the quantity of material removed amounting to 9,950 cubic yards.

On the 8th November this dredge left Wallace for Pictou, and on the 9th, when off Cape John a heavy storm was met with, and it had to be abandoned, sinking in 60 feet of water, the crew losing everything they had on board, and barely escaping with their lives. The scows were saved and towed to Pictou.

Up to the time of its loss this dredge had done 9,950 cubic yards of work during the fiscal year, at a cost of 46.88 cents per cubic yard.

The sum of \$59.66 was received from the sale of condemned materials and placed to the credit of the Receiver General.

THE "PRINCE EDWARD."

At the commencement of the fiscal year the "Prince Edward" was engaged in deepening the channel at Tignish, P.E.I. and remained there until the 27th August, when it was taken to Charlottetown, where it was hauled out of the water, and the careful examination which was made showed that the repairs required were very extensive, and as an appropriation was necessary to defray their cost, the dredge remained unused during the remainder of the fiscal year.

The only work done during the year was at Tignish, where 3,775 cubic yards of gravel, sand and clay were removed at a cost of \$1.56 per cubic yard.

THE "GEORGE MCKENZIE."

During the month of July, 1887, this dredge was at Aspy Bay, Victoria County, N.S., and on the 1st August it was removed to Cheticamp, Inverness County, where it arrived and resumed work on the channel. Up to the 21st October, 16,400 cubic yards of sand, gravel, and stone were removed and a depth of 13 feet made into the harbour. At this last date the weather became unfit for working in so exposed a situation, and the whole of the plant was removed to Hawkesbury, and placed on the Marine Railway for wintering and repairs, which on examination, were found to be very large, so much so that for want of funds only temporary repairs to the dredge and scows could be effected to enable their being sent to McNair's Cove, Antigonish County, at the commencement of the current fiscal year.

The only work done by this dredge during the year was at Cheticamp, where the quantity of materials removed was 16,400 cubic yards, at a cost of $16\frac{67}{100}$ cents per yard.

"THE CHALLENGE."

On the first July, 1887, this dredge was working at Goderich, Ontario, in opening a passage to 18 feet depth, through the shoal that forms off the entrance to the harbour, and in deepening to 14 feet alongside of the wharfing inside the harbour, closing the work on the 28th August, when 14,380 cubic yards of sand and gravel had been removed.

On the 29th August the plant was towed to Kincardine, where it remained until the 27th October, deepening the channel between the piers to 16 feet below zero to admit the large lake steamers, and in cleaning out deposit which had accumulated in the basin to permit vessels to lie and load with salt. The work done here consisted in the removal of 11,550 cubic yards of sand, clay and hardpan.

The plant wintered at Goderich, where repairs were made, and on the 7th May work was resumed on the shoal which had again formed off the entrance, and also in removing deposited material which had accumulated between the channel piers. This occupied until the 13th June, when a further quantity of 6,270 cubic yards of sand were removed. On the 14th the dredge and scows were towed to Kincardine, where work was commenced in removing the material which had accumulated in the basin and between the channel piers, and up to the close of the fiscal year a further quantity of 7,320 cubic yards of sand and clay were removed.

The dredge is in a good state of repair, but the scows, owing to old age and hard work, must be renewed. The tug is, with the exception of some portions of its machinery, which must be renewed during the ensuing winter, in very good order.

The total quantity of work done by this dredge during the year was 39,520 cubic yards, at a cost of $13\frac{1}{2}$ cents per cubic yard.

THE "NIPISSING."

At the close of the last fiscal year the "Nipissing" was engaged in straightening and deepening the channel of the Richelieu, about half a mile below the village of St. Antoine, between the island and the western shore, and remained there until the 13th August, when a channel 9 feet in depth had been opened, and 14,940 cubic yards of clay, hardpan and stone removed.

Between the 17th August and 3rd September, work was done in the upper arm of the River Chateauguay in making 8 feet of depth, to obtain which a large amount of blasting had to be done, as many boulders of large size were met with which could not be got rid of in any other way.

On the 9th September work was commenced in the Gatineau, about one-third of a mile below the C.P.R. bridge, and on the north side of the river, where, owing to the lowness of the water and the slides which had taken place in the bank of the river, the channel had become filled to such an extent that loaded barges could not pass. A clear channel was, however, formed, and a cut was also made through a shoal off the ferry wharf at Gatineau Point, a depth of 9 feet having been obtained by the removal of 11,140 cubic yards of sand and clay, mixed with a very large quantity of sawdust and the chips produced by grinding slabs and edgings at the mills on the river, which is simply a mistake and should be prevented.

On 2nd November work was commenced in removing a deposit of sand which almost completely blocked the entrance into the South Nation River. The cutting made was 575 feet in length, 35 feet in width, and 8 feet deep, and was completed on the 19th November, when 6,018 cubic yards of clay and sand were removed.

During the winter repairs were made to the dredge and scows, and the machinery of the tug "Dennis" was transferred to a new hull which had been built at Ottawa.

On the 23rd May, work was commenced in opening a channel into Papineauville Bay from the Ottawa, and at the close of the fiscal year good progress had been made, and 14,895 cubic yards of clay and sand removed.

The total quantity removed during the year amounted to 50,848 cubic yards, at a cost of $16\frac{1}{2}$ cents per cubic yard.

THE "ONTARIO."

This dredge was at Port Hope at the commencement of the fiscal year, and remained there until the 25th August, having removed a bar which had formed at the mouth of the harbour, and taken away 12,600 cubic yards of clay and sand.

Between the 27th August and 24th September work was done at Port Darlington for and on account of the Harbour Commissioners of that place, and a depth of 13 feet was made in the inner part of the harbour, and 14 feet between the piers and the portion of the harbour towards Lake Ontario, and 13,080 cubic yards of sand, clay and stone were removed.

At Newcastle work was done at the expense of the Harbour Company between the 26th September and 22nd October, and a depth of 14 feet was obtained by the removal of 6,840 cubic yards of clay and sand.

During removal to winter quarters at Cobourg the plant was caught in the storm of the 23rd October, and one scow received much damage and had to be taken to Newcastle, the remainder getting to Cobourg, and on arrival there it was found that the tug "Sir John" had received such an amount of damage that it had to be taken in April to St. Catharines for repairs.

On 15th May work was commenced in clearing up the inner harbour to 13 feet, and up to 13th June 5,820 cubic yards of sand were removed.

Between the 14th and 30th June the plant was engaged in deepening the channel off the wharves at Brighton to 12 feet, and removed 5,130 cubic yards of mud and gravel.

The total quantity of materials removed during the year amounted to 43,470 cubic yards, at a cost of $13\frac{1}{5}$ cents per cubic yard.

THE "QUEEN."

On the 1st July, 1887, this dredge was at Laprairie engaged in opening a new channel from the main channel in the St. Lawrence to the public wharf, and remained until the 1st September, up to which date a depth of 7 feet had been obtained, and 8,604 cubic yards of clay and stone removed.

On the 2nd September work was commenced on the upper arm of the Chateauguay, the "Nipissing" having been removed to the Gatineau, and continued until the close of navigation, when a channel 775 feet in length was completed, and 10,163 cubic yards of sand, clay, gravel and stone were removed, which, added to the work done by the "Nipissing," makes a total at that place of 14,018 cubic yards.

This dredge and scows wintered in Montreal, where it received a general overhauling prior to the 21st May, when it was sent to work on the shoals in the Richelieu below St. Antoine, and at the close of the fiscal year had removed 5,088 cubic yards of clay.

The total amount of work done during the year was 23,855 cubic yards, at a cost of 35 $\frac{1}{8}$ cents per cubic yard.

THE "ST. LOUIS."

This dredge was placed at work early in July, 1887, on the "feeder" or cut between the St. Lawrence and the River St. Louis, and on the 16th October the work was finished, and the dredge brought back to Ottawa.

On the 6th June work was commenced in deepening the north branch of the Rideau to 7 feet, from the canal to Kemptville, and was engaged thereon at the close of the fiscal year.

On the "feeder" 16,390 cubic yards of clay, and on the Rideau 3,000 cubic yards of fine sand, making a grand total for the year of 19,390 cubic yards were removed at a cost of 20 $\frac{1}{8}$ cents per cubic yard.

THE "WINNIPEG."

At the commencement of the fiscal year the "Winnipeg" was engaged in dredging in the west slough, near West Selkirk, in order to allow steamboats and craft plying on the Red River better access to the industries on the slough, and afford increased accommodation for boats wintering at that place.

On the 1st August, 1887, work was commenced in the channel at the mouth of the Red River, and continued until the end of the month, when the plant was removed to "Salimony's Channel," about two and a-half miles from the mouth where a cut was made through the shoal, giving 12 feet in depth and a width of 50 feet at the top.

Owing to the expenditure of the appropriation, the dredging plant was laid up at the end of September. In June, 1888, it was placed to deepen the river front at West Selkirk, between Maria Street and Manitoba Avenue, the work being brought to completion on 30th June.

The total quantity removed during the year amounted to 53,880 cubic yards, at a cost of 17 cents per cubic yard.

THE "PRIESTMAN."

During 1887 only a small amount of work was done by this dredge on the White Mud River, and operations were conducted between the 4th August and 29th September only.

In June, 1888, this dredge was placed to work in removing shoals in the river between Totogan and McArthur's Landing, and at the close of the year was engaged thereat.

The work done during the year amounted to 9,317 cubic yards, at a cost of 25 cents per cubic yard.

THE "PACIFIC."

Between the 1st July and 24th December, 1887, this dredge was employed in removing clay and boulders surrounding the site of Dredger Rock, Victoria Harbour, B. C.

On the 23rd February following, work was resumed off Shoal Point, Victoria Harbour, and continued until 9th April when the plant was removed to Esquimalt
82 [1888]

for the purpose of deepening the entrance to the graving dock, and was engaged on that work at the close of the fiscal year.

The work done by this dredge during the year though comparatively small in amount, was done in unfavourable localities and where, as at Dredger Rock, explosives had to be used to facilitate the removal of boulders, and also in the removal of the remains of piles at the graving dock.

The total quantity amounted to 14,773 cubic yards, at a cost of 86½ cents per yard.

THE "SAMSON."

The snag boat "Samson" was employed up to the close of 1887 in connection with the works at the mouth of the Fraser River.

Between the 11th February and 30th June, 1888, this boat was engaged in removing snags from the channel of the Fraser from its mouth up to Harrison River, a distance of about 90 miles, and 410 of these obstructions were removed.

DREDGING PLANT.

The dredging plant belonging to the Department is as follows:—

In the Maritime Provinces.

The steam hopper dredge,	"St. Lawrence."
do	do "Canada."
The dipper	do "New Dominion" and six scows.
do	do "Prince Edward" and four scows.
do	do "George McKenzie" and three scows; also five scows which were attached to the lost dredge, "Cape Breton."

In Quebec.

The dipper dredge	"Queen of Canada" and two scows.
do	"Nipissing," two scows and tug "Ottawa."
do	"St. Louis" and two scows.
The stone lifter,	"Baillairgé."

In Ontario.

The dipper dredge	"Challenge," two scows and tug "Trudeau."
do	"Ontario," two scows and tug "Sir John."

In Manitoba.

The dipper dredge	"Winnipeg," two scows and tug "Sir Hector."
The bucket dredge,	"Priestman," and tug "Victoria."

In British Columbia.

The elevator dredge	"Pacific," six scows and tug "Georgie."
The snag boat	"Samson."

CLASSIFICATION of Disbursements of the following Dredges, during the Year ended 30th June, 1888.

"ST. LAWRENCE."

Items.	July.	August.	September.	October.	November.	Dec.	Jan.	Feb.	Mar.	April.	May.	June.	Grand Totals.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Wages.....	689 48	508 33	508 33	508 33	919 84	1,092 98	581 11	565 34	472 58	513 58	519 08	.....	6,878 98
Coal.....	289 40	141 00	.....	.....	49 45	.....	.....	.....	.....	.....	4 60	.....	484 45
Provisions.....	266 21	95 65	270 13	102 12	86 67	223 72	38 15	.....	.....	.....	.....	67 26	1,089 91
Stores.....	168 24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	168 24
Equipment.....	.....	.....	.....	.....	1 20	.....	.....	3 75	.....	.....	.....	.....	4 95
Water.....	2 40	.....	15 40	3 60	.....	.....	.....	.....	.....	.....	.....	.....	21 40
Repairs.....	322 80	.....	.....	.....	.....	98 57	100 00	.....	.....	117 62	588 00	.....	1,221 99
Pilotage.....	48 00	81 90	34 00	37 50	.....	.....	.....	.....	.....	.....	40 00	.....	280 60
Wharfrage.....	.....	.....	16 00	.....	.....	.....	24 00	.....	.....	77 20	.....	.....	117 20
Contingencies.....	8 54	.....	31 16	5 00	.....	10 78	8 87	.....	.....	.....	4 80	.....	69 15
Totals.....	1,735 07	825 98	925 02	656 55	1,057 16	1,421 05	752 13	569 09	472 58	708 40	1,156 48	67 26	10,346 77
Working expenses.....	1,294 48	825 98	925 02	656 55	50 65	.....	.....	252 33	252 33	.....	568 48	67 26	4,893 08
Repairs, extraordinary.....	440 59	.....	.....	.....	1,006 51	1,421 05	752 13	316 76	220 25	708 40	588 00	.....	5,453 69
Totals.....	1,735 07	825 98	925 02	656 55	1,057 16	1,421 05	752 13	569 09	472 58	708 40	1,156 48	67 26	10,346 77

CLASSIFICATION of Disbursements of the following Dredges, & — Continued.

“CANADA.”

Items.	July.	August.	September	October.	November	Dec.	Jan.	Feb.	Mar.	April.	May.	June.	Grand Totals.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Wages.....	773 61	398 55	390 33	387 52	259 46	227 33	167 33	167 33	167 33	301 42	411 27		3,651 51
Coal.....	53 00	406 12			312 20								771 32
Provisions.....	38 21	180 31	100 52	131 84	12 00	2 5 45							688 36
Stores.....	185 43	54 42	45 48								21 93		327 36
Equipment.....	78 33	12 65	38 50	89 40							20 55		219 43
— Water.....		1 00	6 43					2 52					10 50
— Repairs.....	995 67	10 40	769 73	75 00	23 49		62 85	267 15	253 56		44 70		2,491 54
— Pilotage.....	52 50	58 00	48 00	52 00	10 00						38 00		258 50
— Wharfage.....						45 00							45 00
— Contingencies.....		10 40	14 14			134 00		2 94					161 48
Totals.....	2,76 81	1,131 85	1,433 18	745 76	616 15	632 28	230 18	439 94	420 88	301 42	536 45		8,654 90
Working expenses.....	924 88	1,131 45	572 97	576 89	581 66	167 09	167 33	162 83	167 33		418 13		4,880 56
Repairs, ordinary.....		10 40											10 40
do extraordinary.....	1,251 93		860 21	168 87	34 49	465 19	62 85	247 11	253 55	301 42	118 32		3,763 94
Totals.....	2,176 81	1,131 85	1,433 18	745 76	616 15	632 28	230 18	439 94	420 88	301 42	536 45		8,654 90

CLASSIFICATION of Disbursements of the following Dredges, &c.—Continued.

“NEW DOMINION.”

Items.	July.	August.	September.	October.	November.	Dec.	Jan.	Feb.	Mar.	April.	May.	June.	Grand Totals.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Wages.....	806 86	507 17	493 96	393 49	155 00	157 50	155 00	152 50	157 50	296 26	157 50	.....	3,432 74
Coal.....	200 00	108 75	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	308 75
Stores.....	73 88	.....	82 35	2 50	22 88	.....	.....	.....	.....	.....	4 08	.....	185 99
Equipment.....	.....	.....	6 00	.....	12 78	.....	.....	.....	.....	.....	.....	.....	18 78
Water.....	7 12	.....	.....	.....	.....	.....	.....	.....	.....	.....	7 60	.....	14 72
Repairs.....	82 42	184 82	.....	.....	.....	17 93	.....	.....	138 10	.....	166 05	.....	679 33
Towage.....	339 00	192 00	171 00	506 00	.....	.....	.....	.....	.....	.....	.....	.....	1,208 00
Contingencies.....	.....	.....	.....	12 64	.....	.....	.....	.....	.....	.....	.....	.....	12 64
Totals.....	1,509 29	807 92	938 13	902 29	203 30	175 43	155 00	152 50	285 60	296 26	335 20	.....	5,730 95
Working expenses.....	1,426 86	807 92	670 96	902 29	22 88	.....	155 00	152 50	157 50	.....	157 50	.....	4,453 41
Repairs extraordinary.....	82 43	.....	267 17	.....	180 42	175 43	.....	.....	138 10	296 26	177 73	.....	1,307 51
Totals.....	1,509 29	807 92	938 13	902 29	203 30	175 43	155 00	152 50	285 60	293 26	335 23	.....	5,760 95

“CAPE BRETON.”

Wages.....	310 00	157 50	289 16	580 00	303 08	.....	.....	.....	.....	.....	.....	.....	1,639 74
Coal.....	.....	.....	.....	.....	66 86	.....	3 40	.....	.....	.....	.....	.....	70 26
Stores.....	329 59	.....	.....	88 11	1 69	.....	.....	.....	.....	.....	.....	.....	419 39
Water.....	5 60	.....	.....	4 65	13 50	.....	.....	.....	.....	.....	.....	.....	23 75
Repairs.....	940 58	.....	.....	.....	54 90	25 07	.....	.....	.....	.....	.....	.....	1,020 55
TOWAGE.....	.....	.....	.....	125 00	944 75	.....	.....	.....	.....	.....	.....	.....	1,069 75

	8 90	64 08	3 40	72 98
Contingencies				
Totals.....	1,594 67	1,448 84	3 40	4,316 40
Working expenses... Repairs, extraordi- nary.....	289 16	1,370 27	3 40	2,460 89
Totals.....	1,594 67	1,448 84	3 40	4,316 40

“PRINCE EDWARD.”

Wages.....	612 76	559 53	157 50	155 00	152 50	157 50	153 50	157 50	3,521 24
Coal.....	118 92	10 00							128 92
Store.....	121 68								121 68
Water.....	36 00	30 00	2 40						125 10
Repairs.....	7 50						200 00		207 50
Pilotage.....	50 00	100 00							150 00
Towage.....	936 40	95 04							1,091 44
Contingencies.....			1 26	7 97					9 23
Totals.....	620 26	1,820 76	551 20	165 47	152 50	157 50	352 50	157 50	5,355 11
Working expenses... Repairs, extraordi- nary.....	457 76	1,820 75	551 20		165 00	157 50	153 50	157 50	3,843 41
Totals.....	162 50	424 20		165 47			200 00		1,511 70
Totals.....	620 26	1,820 75	551 20	166 47	152 50	157 50	352 50	157 50	5,355 11

CLASSIFICATION of Disbursements of the following Dredges, &c.—Continued.

“GEO. MCKENZIE.”

Items.	July.	August.	September.	October.	November.	Dec.	Jan.	Feb.	March.	April.	May.	June.	Grand Totals.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Wages.....	369 17	478 25	492 64	488 15	233 89	179 60	155 00	152 50	157 50	374 10	160 00	.....	3,240 80
Coal.....	147 00	13 50	.....	114 17	.....	.....	25 38	2 50	.....	.....	49 43	.....	302 55
Stores.....	.....	.....	.....	4 32	.....	.....	.....	.....	.....	.....	106 90	.....	53 75
Equipment.....	.....	3 25	.....	.....	.....	.....	.....	.....	.....	.....	33 00	.....	110 15
Water.....	3 25	45 00	60 00	27 50	.....	.....	.....	.....	.....	.....	.....	.....	135 75
Repairs.....	91 54	.....	.....	4 50	48 98	.....	.....	.....	.....	.....	.....	.....	256 81
Towage.....	410 00	.....	660 00	718 88	895 02	10 00	.....	.....	.....	.....	.....	.....	2,693 90
Harbage.....	2 00	.....	.....	.....	30 00	.....	.....	.....	.....	.....	.....	.....	32 00
Contingencies.....	4 50	.....	.....	.....	17 74	.....	.....	.....	.....	.....	.....	.....	22 24
Totals.....	1,027 46	540 00	1,212 64	1,357 52	1,225 63	189 60	180 38	192 27	199 02	374 10	349 33	.....	6,847 95
Working expenses.	773 92	540 00	1,212 64	1,357 52	1,176 65	.....	155 00	152 50	157 50	.....	160 00	.....	5,685 73
Repairs, extraordinary.....	253 54	.....	.....	.....	48 98	189 60	25 38	39 77	41 52	374 10	189 33	.....	1,162 22
Totals.....	1,027 46	540 00	1,212 64	1,357 52	1,225 63	189 60	180 38	192 27	199 02	374 10	349 33	.....	6,847 95

“CHALLENGE.”

Wages.....	365 00	385 00	385 00	430 62	30 00	30 00	30 00	30 00	30 00	190 00	388 14	395 00	2,708 76
Coal.....	195 27	229 49	.....	.....	.....	.....	.....	.....	.....	309 69	254 02	.....	988 42
Wood.....	3 25	4 50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7 75
Provisions.....	100 00	100 72	100 00	100 00	.....	.....	.....	.....	.....	29 25	91 96	100 00	593 68
Stores.....	43 24	19 82	10 10	36 68	.....	.....	.....	.....	.....	41 25	47 72	.....	186 78
Equipment.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98 57	41 50	.....	389 60
Repairs.....	53 93	14 36	8 80	164 69	.....	.....	.....	.....	.....	.....	.....	7 75	.....

	2 00	107 83	16 28	4 40	.....	.....	.....	.....	.....	13 21	2 00	104 33	7 30	257 35
Contingencies.....	782 64	857 22	524 68	736 37	30 00	30 00	30 00	30 00	30 00	43 21	670 76	947 71	510 05	5,192 61
Totals.....	782 64	857 22	524 68	736 37	30 00	30 00	30 00	30 00	30 00	43 21	670 76	947 71	510 05	5,192 61
Working expenses.	728 71	842 86	515 88	571 68	30 00	30 00	30 00	30 00	30 00	43 21	572 19	906 21	502 50	4,803 01
Repairs, ordinary...	53 93	14 36	8 80	161 69	.....	.....	.....	.....	.....	.....	98 57	41 56	7 75	224 91
do extraordinary.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	164 69
Totals.....	782 64	857 22	524 68	736 37	30 00	30 00	30 00	30 00	30 00	43 21	670 76	947 71	510 05	5,192 61

"NIPissing."

Wages.....	380 16	427 89	442 23	436 56	359 67	118 00	151 13	.....	.....	.....	255 37	389 20	410 00	3,380 21
Coal.....	287 50	132 70	261 26	13 08	616 95	.....	.....	.....	.....	.....	.....	.....	682 65	1,935 14
Wood.....	.....	.....	.....	.....	23 41	.....	.....	.....	.....	.....	.....	.....	.....	22 41
Provisions.....	101 00	105 17	103 64	107 00	86 66	.....	.....	.....	.....	.....	.....	31 01	100 00	633 48
Stores.....	37 20	25 00	9 20	35 82	.....	.....	.....	.....	.....	.....	.....	19 10	3 79	131 11
Equipment.....	3 50	16 48	25 63	.....	.....	.....	.....	.....	.....	.....	34 48	112 49	.....	192 58
Repairs.....	2 25	12 50	8 45	45 00	1 75	5 08	41 00	.....	.....	.....	1,403 20	405 61	21 46	1,946 33
Pilotage.....	20 00	20 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40 00
Towage.....	.....	100 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	100 00
Contingencies.....	.....	10 55	2 55	.....	.....	.....	.....	.....	.....	.....	10 31	.....	.....	23 41
Totals.....	811 61	851 29	792 96	637 46	1,087 44	123 03	192 13	.....	.....	.....	1,703 36	957 44	1,217 90	8,404 67
Working expenses.	839 36	838 79	784 51	592 46	1,085 69	118 00	151 13	.....	.....	.....	300 16	551 80	1,196 44	6,458 34
Repairs, ordinary...	2 25	12 50	8 45	45 00	1 75	5 08	41 00	.....	.....	.....	290 86	405 64	21 46	833 99
do extraordinary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,112 34	.....	.....	1,112 34
Totals.....	841 61	851 29	792 96	637 46	1,087 44	123 03	192 13	.....	.....	.....	1,703 36	957 44	1,217 90	8,404 67

CLASSIFICATION of Disbursements of the following Dredges, &c.—Continued.

“ONTARIO.”

Items.	July.	August.	September.	October.	November.	Dec.	Jan.	Feb.	March.	April.	May.	June.	Grand Totals.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Wages	419 17	380 00	.....	.....	30 00	150 00	90 00	90 00	90 00	205 00	378 39	380 00	2,212 86
Coal .....	.....	470 00	.....	.....	.....	.....	.....	.....	.....	30 00	.....	505 00	1,005 00
Wood .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	100 00	2 50	2 50
Provisions	97 42	100 00	.....	.....	.....	.....	.....	.....	.....	.....	81 17	101 31	398 73
Stores	44 68	33 00	.....	49 49	.....	.....	.....	.....	.....	120 32	53 59	10 46	218 80
Equipment	4 75	15 00	.....	.....	.....	.....	.....	.....	.....	834 54	31 85	41 68	235 31
Repairs	45 00	5 25	.....	86 84	302 65	.....	.....	.....	.....	.....	10 00	6 00	1,314 43
do extraordinary .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16 00
Pilotage .....	.....	5 01	100 00	20 30	.....	.....	.....	.....	10 65	.....	29 63	110 15	276 74
Contingencies .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	611 02	1,009 26	100 00	155 63	332 65	150 00	90 00	90 00	100 65	1,189 86	687 63	1,162 40	5,679 10
Working expenses	556 02	1,003 01	100 00	69 79	30 00	150 00	90 00	90 00	100 65	355 32	652 78	1,157 10	4,354 67
Repairs, ordinary	45 00	5 25	.....	86 84	2 65	.....	.....	.....	.....	335 56	31 85	5 30	515 45
do extraordinary .....	.....	.....	.....	.....	300 00	.....	.....	.....	.....	498 98	.....	.....	798 98
Totals	611 02	1,008 26	100 00	156 63	332 65	150 00	90 00	90 00	100 65	1,189 86	687 63	1,162 40	5,679 10

“QUEEN.”

Wages	332 50	380 62	330 00	330 00	247 70	30 00	30 00	30 00	70 00	234 75	308 39	307 17	2,621 13
Coal	90 00	360 69	109 34	.....	337 43	.....	.....	.....	.....	.....	324 81	.....	1,372 30
Wood	3 39	12 56	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15 95
Provisions	91 00	90 31	93 61	90 00	43 26	.....	.....	.....	.....	119 48	51 00	90 33	552 65
Stores	16 86	55 16	60 71	6 50	8 38	2 75	.....	.....	.....	30 26	17 85	10 42	328 15
Equipment .....	.....	50	4 85	.....	.....	.....	.....	.....	.....	985 79	117 71	.....	185 32
Repairs	25 10	140 11	118 07	6 84	15 65	10 80	.....	.....	.....	.....	89 40	110 68	1,502 44
Pilotage .....	.....	.....	.....	.....	5 30	.....	.....	.....	.....	.....	.....	.....	5 30

Towage	310 00	10 00	310 00	140 00	181 05	21 50	8 76	170 00	300 00	191 05
Contingencies	888 85	1,352 06	310 00	847 72	221 85	91 50	1,399 04	1,082 19	818 60	1,870 28
Totals	843 75	908 58	736 50	832 07	211 05	91 50	413 25	992 79	707 92	7,012 11
Working expenses..	26 10	142 11	6 81	16 65	10 80	.....	287 08	89 40	110 68	813 73
Repairs, ordinary..	.....	.....	.....	.....	.....	.....	689 71	.....	.....	683 71
do extraordinary	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals	868 85	1,352 06	743 34	847 72	221 85	91 50	1,399 04	1,082 19	818 60	8,514 55

"ST. LOUIS."

Wages	219 94	404 55	163 25	37 50	37 50	.....	111 00	210 50	319 25	2,004 44
Coal .....	.....	105 00	27 00	.....	.....	.....	.....	.....	295 10	501 77
Wood	34 00	5 00	34 00	.....	.....	.....	.....	12 78	71 31	220 09
Provisions .....	.....	21 48	12 22	.....	.....	.....	.....	14 62	9 50	57 92
Stores	19 88	6 50	.....	.....	.....	.....	15 50	14 75	60 88	125 66
Equipment	29 9	1 75	100 00	.....	.....	.....	.....	6 81	5 31	45 78
Repairs	300 00	.....	429 55	.....	.....	.....	.....	.....	.....	102 50
Towage .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	931 55
Contingencies	608 24	575 73	771 02	37 50	37 50	2 00	128 50	259 46	1,021 36	4,054 60
Totals	576 33	615 30	771 02	37 50	37 50	2 00	128 50	252 65	1,016 04	4,008 92
Working expenses..	29 91	1 75	.....	.....	.....	.....	.....	6 81	5 31	45 78
Repairs, ordinary...	606 34	575 73	771 02	37 50	37 50	2 00	128 50	259 46	1,021 35	4,054 60
Totals .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

CLASSIFICATION of Disbursements of the following Dredges, &c.—Continued.

“WINNIPEG.”

Items.	July.	August.	Septemb.	October.	November.	Dec.	Jan.	Feb.	March.	April.	May.	June.	Grand Totals.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Wages	570 00	570 00	570 00	226 83	80 00	80 00	80 00	80 00	80 00	279 83	540 00	570 00	3,728 66
Coal	693 17	707 35	655 72	.....	.....	25 27	.....	.....	.....	.....	.....	738 85	2,795 09
Wood .....	.....	.....	.....	96 64	.....	.....	.....	.....	.....	.....	243 57	.....	25 27
Provisions	292 28	292 28	282 85	.....	.....	.....	.....	.....	.....	.....	342 42	282 86	1,490 48
Equipment	291 98	31 70	215 72	.....	.....	.....	.....	.....	.....	92 33	136 72	527 50	1,249 08
Repairs	235 42	150 28	179 05	100 98	.....	.....	.....	.....	.....	.....	181 85	108 57	476 47
Contingencies .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	956 12
Totals	2,085 85	1,751 58	1,957 52	424 45	80 00	105 27	80 00	80 00	80 00	372 16	1,444 56	2,227 78	10,719 17
Working expenses.	2,085 85	1,719 88	1,771 80	424 45	80 00	105 27	80 00	80 00	80 00	279 83	1,307 84	2,227 78	10,242 70
Repairs, ordinary ..	.....	31 70	.....	.....	.....	.....	.....	.....	.....	.....	61 45	.....	93 15
do extraordinary ..	.....	.....	215 72	.....	.....	.....	.....	.....	.....	92 33	75 27	.....	383 32
Totals	2,085 85	1,751 58	1,987 52	424 45	80 00	105 27	80 00	80 00	80 00	372 16	1,444 56	2,227 78	10,719 17

“PRIESTMAN.”

Wages	120 00	298 00	270 00	160 00	30 00	30 00	75 00	30 00	30 00	110 00	180 00	270 00	1,603 00
Coal .....	.....	294 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	264 00
Wood .....	.....	.....	34 56	.....	.....	.....	.....	.....	.....	.....	.....	.....	34 56
Provisions .....	.....	208 21	188 57	62 68	.....	.....	.....	.....	.....	.....	97 42	188 57	745 45
Equipment .....	.....	55 40	28 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	83 00
Repairs .....	.....	3 00	115 61	.....	.....	.....	.....	.....	.....	.....	.....	.....	118 61
Contingencies .....	.....	94 42	88 71	4 50	.....	6 90	.....	.....	.....	.....	.....	.....	226 85
Totals	120 00	933 03	725 39	237 18	30 00	36 90	75 00	30 00	30 00	110 00	277 42	489 89	3,074 81

Working expenses..	120 00	920 03	609 78	227 18	30 00	36 90	75 00	30 00	30 00	110 00	277 42	489 89	2,956 20
Repairs, ordinary...	.....	3 00	38 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	41 00
do extraordinary	.....	.....	77 61	.....	.....	.....	.....	.....	.....	.....	.....	.....	77 61
Totals.....	120 00	923 03	725 39	227 18	30 00	36 90	75 00	30 00	30 00	110 00	277 42	489 89	3,074 81

" PACIFIC."

Wages.....	1,248 75	25 48	1,230 00	1,712 45	369 87	1,250 83	330 02	1,971 84	690 50	1,831 95	436 34	1,952 63	12,837 24
Coal.....	137 50	.....	127 12	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,864 57
Wood.....	52 25	57 00	34 50	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,688 65
Water.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Provisions.....	161 68	198 35	127 60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stores.....	68 71	56 70	48 75	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Equipment.....	44 31	29 35	19 71	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Repairs.....	230 73	29 35	124 77	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	1,933 93	366 88	1,712 45	1,712 45	369 87	1,250 83	330 02	1,971 84	690 50	1,831 95	436 34	1,952 63	12,837 24
Working expenses..	1,713 20	337 53	1,687 68	1,687 68	334 87	1,245 83	208 28	187 66	675 50	1,766 95	436 34	1,480 73	9,864 57
Repairs, ordinary..	54 22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	184 02
do extraordinary	166 51	29 35	124 77	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,688 65
Totals.....	1,933 93	366 88	1,712 45	1,712 45	369 87	1,250 83	330 02	1,971 84	690 50	1,831 95	436 34	1,952 63	12,837 24

" SAMSON."

Wages.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coal.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wood.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Provisions.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stores.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Equipment.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Repairs.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	543 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Working expenses..	8 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Repairs, ordinary..	81 63	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
do extraordinary	463 32	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	543 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

CLASSIFICATION and Quantities of Material removed by the following Dredges, during the Year ended 30th June, 1888.

"ST. LAWRENCE."

Description of Material Dredged.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	June.	Grand Totals.
Clay	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sand—ordinary	.....	.....	2,800	.....	.....	.....	.....	.....	.....	.....	.....	4,725	8,487
Sand—very fine	.....	5,250	1,487	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,800
Mud and shells	2,625	.....	.....	7,000	.....	.....	.....	.....	.....	.....	3,763	4,725	9,363
Totals	2,625	5,250	4,287	7,000	.....	.....	.....	.....	.....	.....	7,526	9,450	15,488
													36,137
													Cubic yards.

"CANADA."

Clay	4,850	4,950	5,130	4,365	360	.....	.....	.....	.....	.....	.....	4,320	31,050
Totals	4,950	4,950	5,130	4,365	360	.....	.....	.....	.....	.....	.....	6,975	31,050

"NEW DOMINION."

Sawdust	2,710	4,760	1,745	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,215
Clay	10,930	6,000	3,037	3,535	.....	.....	.....	.....	.....	.....	.....	.....	23,532
Sand—ordinary	900	.....	1,068	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,968
Sand—very fine	.....	1,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,675	3,675
Mud	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,400
Totals	14,510	11,760	5,880	3,535	.....	.....	.....	.....	.....	.....	.....	3,675	40,780

CLASSIFICATION and Quantities of Material removed by the following Dredges, during the Year ended 30th June, 1888.

“ ONTARIO.”

Description of Material Dredged.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	June.	Grand Totals.
Boulders.....			900										900
Gravel.....		900	4,470	300								2,220	2,220
Clay.....		7,860	8,550	3,780								1,260	5,670
Sand, ordinary.....		5,760									4,560	2,910	31,770
Mud.....												2,910	2,910
Totals.....	5,760	8,760	13,920	4,080							4,560	6,390	43,470

“ QUEEN.”

Boulders.....					192								948
Gravel.....				756									670
Clay.....		1,344	96	612							736	4,352	9,116
Sand, ordinary.....		2,568	3,519	3,202	1,312								5,088
Totals.....	4,540	3,968	3,615	5,140	1,504						736	4,352	23,855

“ ST. LOUIS.”

Clay.....	3,825	6,870	5,695										16,390
Sand, ordinary.....		6,870	5,695									3,000	3,000
Totals.....	3,825	6,870	5,695									3,000	19,350

"WINNIPEG."

Clay	15,130	15,430	11,680	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,460	11,460
Sand and clay. ....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42,420
Totals.	15,130	15,430	11,680	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,460	63,880

"PRIESTMAN."

Clay .....	.....	3,179	3,138	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,317
Totals. .....	.....	3,179	3,138	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,317

"PACIFIC."

Hard-pan and boulders .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,268
Gravel .....	.....	.....	840	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,045
Clay	2,665	2,510	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,710
Clay and stone. ....	.....	380	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	700
Sand, ordinary .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,150
Totals.	2,665	2,860	840	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,773

DREDGE STATEMENT, showing Material removed at different Localities; Total Annual Expenditure on each Dredge an Average Cost per cubic yard.

" CHALLENGE."									
Localities.	Hard Pan.	Boulders.	Gravel.	Clisy.	Clay and Stone	Sand, Ordinary.	Sand, Fine.	Mud.	Totals.
Goderich.....	.....	.....	720	.....	.....	19,930	.....	.....	20,650
Kincardine.....	480	.....	.....	1,200	.....	17,190	.....	.....	18,870
Totals.....	480	720	720	1,200	.....	37,120	.....	.....	39,520
Total Annual Expenditure, \$5,192.64. Cost per cubic yard, 1 3/4c.									
" NIPISSING."									
St. Antoine.....	1,220	12,720	.....	1,000	.....	.....	.....	.....	14,940
Chateaugay.....	.....	1,545	.....	.....	.....	2,50	.....	.....	3,855
Gatineau.....	.....	.....	.....	920	.....	10,220	.....	.....	11,140
South Nation River.....	.....	.....	.....	5,472	.....	546	.....	.....	6,018
Papineauville.....	.....	.....	.....	12,375	.....	2,520	.....	.....	14,895
Totals.....	1,220	14,265	.....	19,767	.....	15,596	.....	.....	50,848
Total Annual Expenditure, \$8,404.67. Cost per cubic yard, 16 1/2c.									
" ONTARIO."									
Port Hope.....	.....	.....	.....	90	.....	11,700	.....	.....	12,600
Port Darlington.....	.....	900	.....	3,090	.....	5,090	.....	.....	13,080
Newcastle.....	.....	.....	.....	1,680	.....	5,160	.....	.....	6,840
Cobourg.....	.....	.....	.....	.....	.....	5,820	.....	.....	5,820
Brighton.....	.....	.....	2,220	.....	.....	.....	.....	2,910	5,130
Totals.....	.....	900	2,220	5,670	.....	31,770	.....	2,910	43,470
Total Annual Expenditure, \$5,679.10. Cost per cubic yard, 13 3/4c.									

DETAILS of Dredging in the Maritime Provinces

Dredge.	Locality.	County.	NEW BRUNSWICK.		
			Quantity	Cost of each Work.	Total Cost.
			C. yds.	\$ cts.	\$ cts.
"New Dominion"	Bellisle Pt.	King's N.B.	15,205	2,382 80	.....
	Grand Lake.	Queen's do	21,910	3,433 55	.....
	Hampton	King's do	3,675	575 91	6,392 26
"Canada"	Yarmouth.	Yarmouth, N.S. ....	.....	.....	.....
"Cape Breton"	Wallace	Cumberland do. ....	.....	.....	.....
"Prince Edward"	Tignish	Prince, P.E.I. ....	.....	.....	.....
"St. Lawrence"	Richibucto	Kent, N.B.	9,362	2,860 24	2,860 24
	Port Hood.	Inverness, N.S. ....	.....	.....	.....
	Middle River	Pictou do ....	.....	.....	.....
	Pictou Ry. Wharf	do do ....	.....	.....	.....
	do Market Wharf	do do ....	.....	.....	.....
"Geo. McKenzie"	Cheticamp	Inverness do ....	.....	.....	.....
			50,152	.....	9,252 50

Dredge.	NEW BRUNSWICK.		NOVA SCOTIA.	
	Quantity.	Cost.	Quantity.	Cost.
	C. yds.	\$ cts.	C. yds.	\$ cts.
"New Dominion"	40,190	6,392 26	.....	.....
"Canada"	.....	.....	31,050	9,348 27
"Cape Breton"	.....	.....	9,950	4,685 21
"Prince Edward"	.....	.....	.....	.....
"St. Lawrence"	9,362	2,860 24	26,775	8,180 17
"George McKenzie"	.....	.....	16,400	7,653 95
	50,152	9,252 50	84,175	29,847 60

for the Year ended 30th June, 1888.

NOVA SCOTIA.			PRINCE EDWARD ISLAND.			Quantity of each Dredge.	Total Expenditure.
Quantity.	Cost of each Work.	Total Cost.	Quantity.	Cost of each Work.	Total Cost.		
C. yds.	\$ cts.	\$ cts.	C. yds.	\$ cts.	\$ cts.	C. yds.	\$ cts.
						40,790	6,392 76
31,050	9,348 27	9,348 27				31,050	9,348 27
9,950	4,665 21	4,665 21				9,950	4,665 21
			3,775	5,899 90	5,899 90	3,775	5,899 90
2,800	855 44						
7,000	2,138 60						
2,275	695 05						
14,700	4,491 08	8,180 17				36,137	11,040 41
16,400	7,653 95	7,653 95				16,400	7,653 95
84,175		29,847 60	3,775		5,899 90	138,102	45,000 00

PRINCE EDWARD ISLAND.		Total Quantity.	Expenditure Dredging.	Superintend- ance.	Total Expenditure.	Cost per Cubic yard.
Quantity.	Cost.					
C. yds.	\$ cts.	C. yds.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
		40,790	5,760 95	631 31	6,392 26	0 15·6711
		31,050	8,654 90	693 37	9,348 27	0 30·107
		9,950	4,316 40	348 81	4,665 21	0 46·8855
3,775	5,899 90	3,775	5,355 11	544 79	5,899 90	1 56·288
		36,137	10,346 77	693 64	11,040 41	0 30·5515
		16,400	6,847 95	806 00	7,653 95	0 46·6704
3,775	5,899 90	138,102	41,282 08	3,717 92	45,000 00	0 32·584

Cost at Localities dredged, for the Year ended 30th June, 1888.

MARITIME PROVINCES.

Dredge.	Locality.	Date.	Time.	Quantity	Cost.	Cost per C. Yard..
		1887.		c. yards.	\$ cts.	\$ cts.
"St. Lawrence" ..	Richibucto, N. B...	July 12 to Sept. 7.	1 mo. 26 days	9,362	2,045 71	0 21·85
	Port Hood, N.S.	Sept. 9 to 30.....	22 days.....	2,800	749 85	0 26·78
	Mid River, Pictou..	Oct. 1 to 18.	18 days.....	7,000	628 41	0 08·977
		1888.				
	Ry. Wharf do	May 15 to 19.....	5 days.....	2,275	132 00	0 05·800
	Market Wharf do	May 22 to June 22.	1 month.....	14,700	775 55	0 05·275
		1887.				
"Canada"	Yarmouth, N. S.	July 1 to Nov. 4 ; 1888, May 10 to June 30.....	5 mo. 26 days	31,050	4,711 72	0 15·1746
		1887.				
"New Dominion"	Bellisle Point, N. B.	July 1 to 18; Sept. 11 to Oct. 15.....	52 days.....	15,205	1,434 38	0 09·43
	Grand Lake, N. B. .	July 19 to Sept. 10.	53 days.....	21,910	1,543 29	0 07·043
		1888.				
	Hampton, N.B.....	June 19 to 30.....	12 days.....	3,675	466 53	0 12·694
		1887.				
"Cape Breton" ...	Wallace, N.S.....	Sept. 26 to Nov. 5.	40 days.....	9,950	2,156 93	0 21·677
"Prince Edward"	Tignish, P. E. I.	July 9 to Sept. 2...	1 mo. 24 days	3,775	1,210 84	0 32·87
"Geo. McKenzie"	Cheticamp, C.B....	Aug. 1 to Oct. 24..	2 mo. 21 days	16,400	3,841 08	0 23·42

EXPENDITURE for Dredging in Nova Scotia for the Sixteen Years ended 30th June, 1888.

County.	Locality.	Total for the Fifteen Years ended 30th June, 1887.						For the Year 1887-88.						Total Quantities C. yds.	Total Cost \$ cts	Cost for each County \$ cts
		Quantity.		Cost.		Quantity.	Cost.	Quantity.		Cost.						
		O. yds.	\$ cts.	\$	cts.			O. yds.	\$ cts.	\$	cts.					
Antigonish.....	Antigonish	22,025	3,649 15											23,075	3,619 15	
	Harbour au Boucher	10,568	2,498 48											10,568	2,498 48	
	Tracadie	2,580	675 26		6,522 89									2,580	675 26	6,922 89
	Annapolis	2,925	1,635 68		1,635 68									2,925	1,635 68	1,635 68
Cape Breton	Lingan	22,267	9,275 56											22,267	9,275 56	
	Sydney	54,600	17,781 54											54,600	17,781 54	
	Little Glace Bay	31,237	10,988 82											31,237	10,988 82	
	Port Oueltonis	17,413	8,242 21											17,413	8,242 21	
	Benacadie Pond	20,860	5,993 80											20,860	5,993 80	
	Christmas Island	19,045	3,364 98		55,647 01									19,045	3,364 98	55,647 01
Colchester.....	Tatamagouche	57,725	17,032 93		17,032 93									57,725	17,032 93	17,032 93
	Parrsboro'	42,595	12,804 68											42,595	12,804 68	
Cumberland	Wallace	50,885	9,908 23		23,712 96			9,950	4,665 21					60,835	14,573 49	21,378 17
	Digby	12,585	5,056 29		5,056 29									12,585	5,056 29	5,056 29
Guysboro'	Guysboro'	5,400	1,413 53											5,400	1,413 53	
	Larry's River	26,230	6,546 70											26,230	6,546 70	
	Port Mulgrave	3,532	1,749 78											3,532	1,749 78	
	Sherbrooke	1,260	496 49		10,206 50									1,260	496 49	10,206 50
	Hezz-t-cook	3,920	2,593 71											3,920	2,593 71	
Halifax	Halifax Ferry	6,177	2,063 38											6,177	2,063 38	
	Herring Cove	12,111	8,015 05											12,111	8,015 05	
	Ketch Harbour	2,989	985 59											2,989	985 59	
	Richmond Wharf	792	182 53											792	182 53	
	Roobe's Wharf	1,750	620 38											1,750	620 38	
	Halifax Ry. Terminus	19,291	6,187 38											19,291	6,187 38	
	Jeddore	21,515	4,958 56											21,515	4,958 56	
	North West Arm	7,360	2,970 39											7,360	2,970 39	
	Cunard's Wharf	1,400	530 04		29,106 91									1,400	530 04	29,106 91

EXPENDITURE for Dredging in Nova Scotia for the Sixteen Years ended 30th June, 1888.—*Concluded.*

County.	Locality.	Total for the Fifteen Years ended 30th June, 1887.		For the Year 1867-88.		Total Quantities C. yds.	Total Cost \$ cts	Cost for each County \$ cts
		Quantity	Cost. \$ cts	Quantity.	Cost.			
Inverness.....	Whycomagh.....	19,780	3,491 31	.....	.....	19,780	3,491 31	.....
	Campbell's Pond.....	4,940	872 83	.....	.....	4,940	872 83	.....
	Port Hastings.....	370	190 37	.....	.....	270	190 37	.....
	Cheticamp.....	97,015	26,868 92	16,400	7,633 95	113,445	34,622 87	.....
	Mabou.....	69,007	29,576 31	.....	.....	69,007	29,576 31	.....
Lunenburg.....	Port Hood.....	.....	61,099 74	2,800	855 44	2,800	855 44	69,609 13
	Lunenburg.....	70,510	22,194 57	.....	.....	70,510	22,194 57	.....
	Mahon Bay.....	21,844	5,958 65	.....	.....	21,844	5,958 65	.....
Picton.....	Vogler's Cove.....	11,610	5,075 53	.....	.....	11,610	5,075 53	33,228 75
	Acadia Coal Co. Wharf.....	10,240	3,560 26	.....	.....	10,240	3,560 26	.....
	Albion Mines.....	9,475	2,185 25	.....	.....	9,475	2,185 25	.....
Queen's.....	East River.....	104,795	26,067 22	.....	.....	104,795	26,067 22	.....
	Halifax Coal Co Wharf.....	1,850	359 90	.....	.....	1,850	359 90	.....
	Pictou Public Wharf.....	7,020	1,634 82	.....	.....	7,020	1,634 82	.....
	do Market Wharf.....	84,960	5,798 74	14,700	4,491 08	39,600	10,289 82	.....
	do Railway Wharf.....	29,889	9,264 29	2,775	695 05	32,164	9,989 34	.....
	do Landing.....	7,345	2 86 01	.....	.....	7,345	2 86 01	.....
	Vale Colliery Wharf.....	1,385	682 15	.....	.....	1,385	682 15	.....
	River John.....	85,173	23,243 98	.....	.....	85,173	23,243 98	.....
	Granton.....	21,435	9,270 92	.....	.....	21,435	9,270 92	.....
	New Glasgow.....	26,310	5,705 09	.....	.....	26,310	5,705 09	.....
Richmond.....	Middle River.....	.....	88,648 68	7,000	2,138 66	7,000	2,138 66	95,373 36
	Liverpool.....	13,940	4,762 38	.....	.....	13,940	4,762 38	.....
Shelburne.....	D'Escouse Cape LeRonde.....	11,860	5,962 13	.....	.....	11,860	5,962 13	.....
	St. Peter's Canal.....	78,891	24,277 56	.....	.....	78,891	24,277 56	.....
	do.....	7,150	2,407 41	.....	.....	7,150	2,407 41	.....
	Grand Goulet.....	23,684	5,570 49	.....	.....	23,684	5,570 49	.....
	River Bourgeois.....	16,920	4,468 87	.....	.....	16,920	4,468 87	.....
Shelburne.....	Marine Slip.....	320	56 53	.....	.....	320	56 53	42,742 99
	Lockport.....	20,825	8,334 85	.....	.....	20,825	8,334 85	6,331 85

Yarmouth	54,382	22,107 20	22,107 20	31,060	9,348 27	9,348 27	85,432	31,455 47	31,455 47
Hants	5,450	1,627 60	1,627 60	.....	.....	.....	5,450	1,627 60	1,627 60
Victoria.....	3,820	1,569 95	1,569 95	.....	.....	.....	3,820	1,569 95	1,569 95
Totals.....	1,343,681	410,343 26	410,343 26	84,176	29,847 60	29,847 60	1,427,866	440,190 86	440,190 86

EXPENDITURE for Dredging in New Brunswick, for the Sixteen Years ended 30th June, 1888.

County.	Locality.	Total for Fifteen Years ended 30th June, 1887.		For the Year 1887-88.		Total. Quantity.	Total Cost. \$ cts.	Cost for each County.
		Quantity.	Cost.	Quantity.	Cost.			
		C. yds.	\$ cts.	C. yds.	\$ cts.			
Gloucester.....	Bathurst.....	72,607	20,629 52			72,607	20,629 52	20,629 52
	Richibucto.....	47,735	14,289 54	9,362	2,860 24	57,097	17,159 78	17,159 78
	Cocagne.....	27,180	9,601 45			27,180	9,601 45	9,601 45
	Buctouche.....	13,005	4,934 24			13,005	4,934 24	4,934 24
	do Priest's Point.....	3,510	1,110 70			3,510	1,110 70	1,110 70
Kent.....	do Chapel Point.....	4,140	1,310 07			4,140	1,310 07	1,310 07
	do Robertson's Wharf.....	45	14 23		2,860 24	45	14 23	34,130 47
Northumberland.....	Horse Shoe.....	160,417	44,594 13			160,417	44,594 13	44,594 13
	Outer Bar.....	13,125	4,032 67			13,125	4,032 67	4,032 67
	Grand Dune.....	37,975	10,121 67			37,975	10,121 67	58,748 47
Queens.....	Grand Lake.....	43,715	7,498 78	219,10	3,433 55	65,625	10,932 33	10,932 33
	do McMann's Cove.....	20,440	4,522 82			20,440	4,522 82	4,522 82
	Jemseg.....	61,305	12,117 74			61,305	12,117 74	12,117 74
	Waashademoak.....	48,975	6,340 83			48,975	6,340 83	33,913 72
St. John.....	I. O. Railway Terminus.....	139,810	37,130 01			139,810	37,130 01	37,130 01
	Navy Island.....	26,294	9,296 79			26,294	9,296 79	9,296 79
	Marble Cove.....	29,925	4,374 40			29,925	4,374 40	4,374 40
	Murray's Mills.....	23,880	3,441 65			23,880	3,441 65	3,441 65
	Indiantown Wharf.....	1,615	182 83			1,615	182 83	182 83
	Long Wharf.....	7,137	2,680 24			7,137	2,680 24	2,680 24
	Adam's Wharf.....	7,513	3,247 29			7,513	3,247 29	3,247 29
	Miller & Woodman's.....	9,275	1,090 42			9,275	1,090 42	1,090 42
	Hayford & Nelson's.....	8,015	932 29			8,015	932 29	932 29
	International Wharf.....	450	52 90			450	52 90	62,448 82
Sunbury.....	Oromocto.....	144,153	27,106 86			144,153	27,106 86	27,106 86

EXPENDITURE for Dredging in Prince Edward Island, for the Sixteen Years ended 30th June, 1888.

County.	Locality.	Total for Fifteen Years ended 30th June, 1887.				For the Year 1887-88.				Total Quantity.	Total Cost.	Cost for each County.
		Quantity.		Cost.		Quantity.		Cost.				
		C. yds.	\$ cts.	\$ cts.	C. yds.	\$ cts.	\$ cts.					
King's ...	Grand River	46,110	8,963 97	.....	.....	46,110	8,963 97	.....	.....	8,963 97	.....	.....
	Montagu River	106,140	17,119 43	.....	.....	106,140	17,119 43	.....	.....	17,119 43	.....	.....
	Murray Harbour	44,430	7,378 33	33,461 73	.....	44,430	7,378 33	.....	.....	7,378 33	.....	33,461 73
	Charlottetown Wharf	41,303	10,264 66	.....	.....	41,303	10,264 66	.....	.....	10,264 66	.....	.....
Queen's	do Ferry	4,045	670 61	.....	.....	4,045	670 61	.....	.....	670 61	.....	.....
	Crapaud	89,782	27,493 03	.....	.....	89,782	27,493 03	.....	.....	27,493 03	.....	.....
	Pownal	44,400	9,604 55	.....	.....	44,400	9,604 55	.....	.....	9,604 55	.....	.....
	Rocky Point	91,440	14,661 16	.....	.....	91,440	14,661 16	.....	.....	14,661 16	.....	.....
	Vernon River	17,860	6,328 72	.....	.....	17,860	6,328 72	.....	.....	6,328 72	.....	.....
	Wood Islands	2,780	548 00	.....	.....	2,780	548 00	.....	.....	548 00	.....	.....
	Nine Mile Creek	31,680	6,286 46	.....	.....	31,680	6,286 46	.....	.....	6,286 46	.....	.....
	Hickey's Wharf	760	150 51	.....	.....	760	150 51	.....	.....	150 51	.....	.....
	Garr's Point	12,165	2,441 28	.....	.....	12,165	2,441 28	.....	.....	2,441 28	.....	.....
	Pinette	3,825	756 24	.....	.....	3,825	756 24	.....	.....	756 24	.....	.....
	Fort Augustus	3,195	631 68	.....	.....	3,195	631 68	.....	.....	631 68	.....	.....
	South Port Ferry	33,015	5,528 75	86,363 55	.....	33,015	5,528 75	.....	.....	5,528 75	.....	86,363 55
Prince	Summerside	15,855	2,495 34	.....	.....	15,855	2,495 34	.....	.....	2,495 34	.....	.....
	Hurd's Point Pier	41,070	7,289 95	.....	.....	41,070	7,289 95	.....	.....	7,289 95	.....	.....
	Tignish	7,612	7,105 55	16,890 84	.....	3,775	5,899 90	.....	.....	5,899 90	.....	21,790 74
	.....	637,427	135,716 12	135,716 12	.....	3,775	5,899 90	.....	.....	5,899 90	.....	141,616 02

EXPENDITURE for Dredging in Quebec, for the Sixteen Years ended 30th June, 1888, from Appropriations, Maritime Provinces.

Magdalen Islands, Co Gaspé	House Harbour	6,800	2,392 92	.....	.....	6,800	2,392 92	.....	.....	2,392 92	.....	.....
	Amherst Harbour	495	242 05	.....	.....	495	242 05	.....	.....	242 05	.....	2,634 97
	River du Loup	2,587	825 47	.....	.....	2,587	825 47	.....	.....	825 47	.....	825 47
	Rimouski	8,123	3,997 59	3,997 59	.....	8,123	3,997 59	.....	.....	3,997 59	.....	3,997 59
.....	.....	18,005	7,458 03	7,458 03	.....	18,005	7,458 03	.....	.....	7,458 03	.....	7,458 03

* From amount voted for Quebec Dredging.

STATEMENT of Dredging, showing Quantities removed in each Province, and cost of each Dredging for the Sixteen Years ended 30th June, 1888.

Fiscal Year.	NEW BRUNSWICK		NOVA SCOTIA.		QUEBEC.		PRINCE EDWARD ISLAND.		Total Quantity. O. Yds.	Total Expenditure \$ cts.	Cost per Cubic Yard. \$ cts.
	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.	Quantity.	Cost.			
	C. Yds.	\$ cts.	C. Yds.	\$ cts.	C. Yds.	\$ cts.	C. Yds.	\$ cts.			
1872-73.....	38,060	13,240 50	23,260	8,432 70	.....	.....	.....	.....	61,310	21,693 20	0 55-328
1873-74.....	57,725	14,395 57	18,600	6,645 61	.....	.....	.....	.....	83,126	23,334 10	0 28-071
1874-75.....	78,223	17,325 05	24,416	13,238 83	6,800	2,393 92	.....	.....	121,294	40,456 77	0 33-354
1875-76.....	79,935	17,040 52	31,974	31,885 90	.....	.....	.....	.....	230,192	49,818 22	0 21-642
1876-77.....	97,690	23,161 90	127,785	34,846 71	.....	.....	.....	.....	299,935	70,766 91	0 23-594
1877-78.....	81,070	23,323 92	108,857	29,607 91	.....	.....	.....	.....	270,787	61,943 04	0 23-983
1878-79.....	13,555	27,400 22	116,307	28,267 59	.....	.....	.....	.....	255,352	61,831 68	0 21-951
1879-80.....	63,510	16,691 79	127,684	34,765 84	.....	.....	.....	.....	228,379	64,386 69	0 28-191
1880-81.....	44,315	12,385 85	87,118	23,061 64	.....	.....	.....	.....	180,085	45,439 46	0 25-232
1881-82.....	79,610	18,696 87	89,666	33,363 71	2,317	693 44	.....	.....	216,531	61,347 15	0 28-331
1882-83.....	48,565	13,422 70	143,616	43,896 93	.....	.....	.....	.....	260,716	67,500 00	0 25-890
1883-84.....	47,098	17,101 38	167,560	48,050 68	.....	.....	.....	.....	284,368	79,509 01	0 27-959
1884-85.....	12,997	24,460 35	76,164	25,250 73	.....	.....	.....	.....	268,369	62,376 68	0 23-243
1885-86.....	68,505	14,874 63	56,790	21,432 05	8,123	3,997 59	.....	.....	142,432	46,706 34	0 33-792
1886-87.....	69,440	11,452 86	53,400	25,621 19	.....	.....	.....	.....	198,977	43,248 79	0 33-56
1887-88.....	50,162	9,252 50	84,175	19,847 60	.....	.....	.....	.....	188,102	45,000 00	0 32-58
	1,166,470	274,048 61	1,385,272	428,255 58	18,005	7,468 03	.....	.....	3,209,954	851,378 24	0 26-52

STATEMENT of Dredging, showing Quantities removed by Hand in each Province, and cost of each Dredging for the Sixteen Years ended 30th June, 1888.

1878-79.....	.....	.....	245	555 13	.....	.....	.....	.....	245	555 13	2 26-56
1879-80.....	.....	.....	12,370	3,665 90	.....	.....	.....	.....	12,370	3,665 90	0 29-61
1880-81.....	.....	.....	11,140	2,560 25	.....	.....	.....	.....	11,140	2,560 25	0 22-98
1881-82.....	.....	.....	10,640	2,650 00	.....	.....	.....	.....	10,640	2,650 00	0 24-90
1882-83.....	.....	.....	8,180	2,600 00	.....	.....	.....	.....	8,180	2,500 00	0 30-52
1883-84.....	.....	.....	5,460	2,500 00	.....	.....	.....	.....	5,460	2,500 00	0 45-78
1884 to 1888.....	.....	.....	43,015	14,431 26	.....	.....	.....	.....	48,045	14,432 28	0 30-03

STATEMENT of Dredging in the Maritime Provinces, showing Quantities removed by, and Expenditure of, each Dredge, for the Sixteen Years ended 30th June, 1888.

Dredge.	Total Quantities and Cost for the Fifteen Years ended 30th June, 1887.				1887-88.				Total for Sixteen Years ended 30th June, 1888.			
	Quantity.		Cost.		Quantity.		Cost.		Quantity.		Cost.	
	C. Yards.	Per Cubic Yard.	\$	cts.	C. Yards.	Per Cubic Yard.	\$	cts.	C. Yards.	Per Cubic Yard.	\$	cts.
"New Dominion"	617,493	0.19.12	118,071	63	40,790	0.15.671	6,392	26	698,283	0.18.90	124,463	89
"Canada"	410,654	0.34.74	142,679	00	31,050	0.30.107	9,348	27	441,701	0.34.40	152,027	27
"Gape Breton"	524,968	0.25.45	135,646	14	9,950	0.46.885	4,665	21	534,938	0.25.85	136,311	35
"Prince Edward"	648,262	0.21.20	137,467	05	3,775	1.66.288	5,899	90	652,037	0.21.98	143,366	95
"St. Lawrence"	541,911	0.31.20	169,100	00	36,137	0.30.551	11,040	41	578,048	0.31.16	180,140	41
"Geo. McKenzie"	314,961	0.31.40	93,916	83	16,400	0.46.670	7,653	95	331,361	0.32.16	106,570	78
	3,058,269	0.26.16	799,880	65	138,102	0.32.58	45,000	00	3,196,371	0.26.43	844,880	65

STATEMENT of Dredging performed by Hand in the Maritime Provinces, showing Quantities removed and Expenditure at each locality, for Sixteen Years ended 30th June, 1888.

Locality.	1872-73 to 1886-87—Fifteen Years.				1887-88.				Total for Sixteen Years ended 30th June, 1888.			
	Quantity.		Cost.		Quantity.		Cost.		Quantity.		Cost.	
	C. Yards.	Per Cubic Yard.	\$	cts.	C. Yards.	Per Cubic Yard.	\$	cts.	C. Yards.	Per Cubic Yard.	\$	cts.
Parraboro', N.S.	42,595	0.30.08	13,804	68	.....	.....	.....	.....	42,595	0.30.06	12,801	68
Windsor, N.S.	5,450	0.29.86	1,617	60	.....	.....	.....	.....	6,450	0.29.88	1,627	60
	48,045	0.30.03	14,432	28	.....	.....	.....	.....	48,045	0.30.03	14,432	28

APPENDIX No. 6.

REPORT ON DEEPENING THE CHANNEL

BETWEEN

MONTREAL AND QUEBEC,

BY

THE MONTREAL HARBOUR COMMISSIONERS.

APPENDIX No. 6.

REPORT OF THE MONTREAL HARBOUR COMMISSIONERS ON THE DEEPENING OF THE CHANNEL BETWEEN MONTREAL AND QUEBEC.

Ref. No. 90,914.

HARBOUR COMMISSIONERS OF MONTREAL,
SECRETARY'S OFFICE,
MONTREAL, 8th September, 1888.

SIR,—In compliance with the request contained in your letter of the 4th July, I have the honour to transmit herewith for the information of the Honourable the Minister of Public Works, a copy of the report made to the Harbour Commissioners of Montreal by their Chief Engineer upon the works of deepening the ship channel of the St. Lawrence between Montreal and Quebec, during the Government fiscal year ended 30th June, 1888.

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

ALEXANDER ROBERTSON,
Secretary.

A. GOBEL, Esq.,
Secretary Department of Public Works,
Ottawa.

HARBOUR COMMISSIONERS OF MONTREAL,
CHIEF ENGINEER'S OFFICE,
MONTREAL, Sept. 7th, 1888.

SIR,—In compliance with the request of the Secretary of Public Works, I beg to submit the following report upon the work of deepening the ship channel of the St. Lawrence, between Montreal and Quebec, during the Government fiscal year, ended 30th June, 1888.

The work in hand is the deepening of the ship channel to 27½ feet at low water instead of 25 feet, the present depth. The breadth of the deepened channel is being made the same as at present, that is 300 feet in the straight parts, with enlargements to about 450 feet at bends and other places where more room is needed.

At the opening of the fiscal year work was being carried on at various points between Cap Charles and Montreal, with the Harbour Commissioner's fleet of dredges and tenders, and operations were continued throughout the year with the exception of the suspension during the winter.

The chief details of the work accomplished during the fiscal year, and the cost of that part done up to the close of navigation, 1887, are as follows:—

CAP CHARLES.

The channel is mainly a cutting through shale rock, and this was practically finished to 26 feet depth at low water in the year ended 30th June, 1887. In May and June, 1888, a dredge, assisted occasionally by stone-lifters, was engaged in cutting through the upper margin of the shoal which consists of hard pan and boulders.

Quantity dredged during the fiscal year, 19,370 cubic yards; boulders removed, 167 cubic yards, at an average cost for both of 4½ cents per cubic yard.

[1888

113

POUILLIER BAYER.

A little dredging was done at the upper margin of the shoal in July, 1887.

Quantity removed by dredge and stone-lifter during the fiscal year, 4,265 cubic yards, costing 70 cents per cubic yard.

CAP À LA ROCHE.

The cutting of the channel through the shoal, which consists almost entirely of shale rock, was continued during the time of navigation by two dredges. The margins of the shoal, at the ends of the channel, are overlaid with boulders, and one to three stone-lifters were engaged a great part of the time of open navigation in removing them. Quantity of shale dredged 166,380 cubic yards, costing 30 $\frac{3}{4}$ cents per cubic yard; boulders removed by stone-lifters, 2,775 cubic yards, costing \$1.45 per yard.

CAP LEVRAUT.

The deepening of the channel to 27 $\frac{1}{2}$ feet at low water was very nearly finished at the close of the fiscal year. A dredge worked a short time last fall and a stone-lifter this spring, and removed in all 1,815 cubic yards, costing \$1.28 per cubic yard.

BATISCAN TRAVERSE.

A dredge and two stone lifters were employed in the fall of 1887, and a dredge alone in May 1888, and finished the channel through to 27 $\frac{1}{2}$ feet at low water.

Quantities removed during the fiscal year, clay and stones dredged, 83,107 cubic yards, costing 16 $\frac{1}{2}$ cents per yard; boulders lifted by stone-lifters, 1,554 cubic yards, costing \$1.49 per yard.

BATISCAN VILLAGE.

Some small shallow places were removed by a dredge and stone-lifters, working in the fall of 1887, and in June, 1888.

Quantity dredged, 12,030 cubic yards; boulders removed by stone-lifters, 513 cubic yards.

CHAMPLAIN.

The dredging was in progress at the opening of the fiscal year and continued with some interruption till 10th October, when the channel was finished to 27 $\frac{1}{2}$ feet at low water.

Quantity dredged during the fiscal year 33,241 cubic yards, costing 34 $\frac{3}{4}$ cents per cubic yard.

BÉCANCOUR.

During last fall and the early part of this summer some detached shoals, chiefly of boulders, were cut away and the Upper Traverse completed to 27 $\frac{1}{2}$ feet at low water.

Quantity dredged 11,974 cubic yards, costing \$1.15 per cubic yard.

PORT ST. FRANCIS.

The Force shoal was cut through to 27 $\frac{1}{2}$ feet depth in July and August, 1887. Quantity dredged 26,656 cubic yards, costing 22 cents per yard.

LAKE ST. PETER.

One to two dredges were employed all the time of navigation in the fiscal year, and at its close only about half a mile of the channel through the lake remained to be dredged.

Quantity removed during the year 746,310 cubic yards, costing 4 $\frac{1}{2}$ cents per cubic yard.

CONTRECOEUR.

A dredge was employed from the opening of navigation 1888 to the close of the fiscal year in the vicinity of Ile St. Ours, and by that time had nearly completed the 27½ feet depth throughout the Contrecoeur channel.

Quantity dredged during the fiscal year 32,085 cubic yards, costing 6 $\frac{3}{16}$ cents per cubic yard.

CAP ST. MICHEL.

A dredge was employed a short time last fall and in the spring of 1888. Quantity dredged 120,740 cubic yards, costing 11½ cents per yard.

VARENNES.

One to two dredges worked part of October and November last, chiefly at the curve opposite the village.

Quantity dredged 127,415 cubic yards, costing 6 $\frac{3}{4}$ cents per yard.

POINTE AUX TREMBLES.

One to two dredges were worked for about two months last fall in different places.

Quantity dredged 83,670 cubic yards, costing 20 $\frac{7}{16}$ cents per yard.

LONGUEUIL.

The shoal through which the ship channel runs consists in part of masses of gravel and boulders and of hard pan and boulders.

Two spoon dredges, one elevator dredge and a stone-lifter were employed upon it at different times from 1st July, 1887, to the close of navigation, and during that time 30,079 cubic yards were removed, costing 77 cents per yard.

MONTREAL.

Dredging was done at intervals in part of the main channel through the harbour. Quantity dredged 5,040 cubic yards, costing 42 cents per yard.

The aggregate quantity of dredging done at all parts in the ship channel during the Government fiscal year ended 30th June, 1888, was 1,509,700 cubic yards, as against 1,341,486 cubic yards in the preceding fiscal year.

The floating plant employed in the work during the year last past consisted of six elevator dredges, three spoon dredges part of the time, three stone-lifters, eight to nine screw-tugs, five barges used as coal tenders and smith's shops, eighteen hopper bottomed scows and five flat-decked scows. Of the six elevator dredges two are for working in earth and have buckets of 16 and 27 cubic feet capacity, one is for rock or earth, and has buckets of 16 cubic feet capacity; one is for rock and has buckets of 4 cubic feet capacity, and the remaining two are for rock with buckets of 6½ cubic feet capacity.

Yours respectfully,

JOHN KENNEDY,
Chief Engineer.

ALEXANDER ROBERTSON, Esq.,
Secretary, &c.

APPENDIX No. 7.



QUEBEC HARBOUR IMPROVEMENTS.



REPORTS ON THE PRINCESS LOUISE EMBANKMENT AND DOCK
WORKS, RIVER ST. CHARLES; AND ON THE
GRAVING DOCK, LÉVIS.

BY

THE QUEBEC HARBOUR COMMISSIONERS.

APPENDIX No. 7.

—

**QUEBEC HARBOUR IMPROVEMENTS—RIVER ST. CHARLES; AND
GRAVING DOCK AT LEVIS.**

—

Ref. No. 91,824.

HARBOUR COMMISSIONERS' OFFICE,
QUEBEC, 10th October, 1888.

SIR,—In compliance with request conveyed in your letter of 4th July last, I have the honour to transmit you herewith the Chief Engineer's report on the Quebec Harbour Works, for the fiscal year ended the 30th June last.

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

A. H. VERRET,
Secretary-Treasurer.

A. GOBEL, Esq.,
Secretary, Public Works Department,
Ottawa.

OTTAWA, 6th October, 1888.

SIR,—I have the honour to submit the following with reference to the works of the Commission under my charge at Quebec, during the fiscal year ended 30th June, 1888.

LOUISE BASIN.

Steady progress was made on the Cross Wall between the Embankment and the northern end of Dalhousie street, and the foundation for the entrance works was successfully laid.

During the winter the gates were built, and are ready for hanging when required. The sluice valves were completed by Mr. Drolet, and have been put in place. A large amount of dredging to 15 feet at low water was done in the Wet Basin, and a cleaning up of the bottom of the Tidal Basin was effected.

A commencement was made in the construction of the South Wall (so-called), and the portion between Dalhousie street and the harbour carrying the outlet of the sewer was completed, together with a part of the wall lying in Dalhousie street. As the foundations of this work can only be carried on at or near low water, much difficulty and loss of time have been incurred.

GRAVING DOCK, LÉVIS.

I have to report that this dock is in good order and condition, and has given satisfaction in the case of vessels occupying it for repairs.

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

HENRY F. PEBBLEY,
Chief Engineer.

A. H. VERRET, Esq.,
Secretary-Treasurer Harbour Commission,
Quebec.

[1888]

APPENDIX No. 8.

REPORT

ON THE

Saguenay District Slide and Booms,

FOR THE FISCAL YEAR ENDED 30TH JUNE, 1888.

BY

HENRY F. PERLEY, Chief Engineer,

AND

JOSEPH ROSA, Superintendent.

APPENDIX No. 8.

SLIDE, BOOMS &c.—SAGUENAY DISTRICT.

Ref. No. 92,837.

CHIEF ENGINEER'S OFFICE,
OTTAWA, 12th November, 1888.

SIR,—I transmit herewith a report by Mr. Joseph Rosa, Assistant Engineer, on the Saguenay Slide, for the fiscal year ended 30th June, 1888.

I have the honour to be, Sir,

Your obedient servant,

HENRY F. PERLEY,
*Chief Engineer.*A. GOBEL, Esq.,
Secretary, Public Works Department,
Ottawa.

QUEBEC, 5th November, 1888.

SIR,—During the past fiscal year the work of reconstructing the slide was finished.

A wharf was built to protect the boom piers at the head of the boom, and the usual necessary repairs were made to the booms, dams and anchor piers.

The number of logs passed through the slide during the year was 48,510.

I have the honour to be, Sir,

Your obedient servant,

JOSEPH ROSA,
*Superintendent.*HENRY F. PERLEY, Esq.,
Chief Engineer, Public Works Department,
Ottawa.

APPENDIX No. 9.

REPORT

ON THE

ST. MAURICE DISTRICT SLIDES AND BOOMS,

FOR THE FISCAL YEAR ENDED 30TH JUNE, 1888.

BY

HENRY F. PERLEY, Chief Engineer,

AND

CHAS. LAJOIE, Superintendent.

APPENDIX No. 9.

SLIDES AND BOOMS—ST. MAURICE DISTRICT.

Ref. No. 91,534.

CHIEF ENGINEER'S OFFICE,
OTTAWA, 2nd October, 1888.

SIR,—Herewith I transmit a report by Mr. C. Lajoie, Superintendent of the St. Maurice District Slides and Booms, on the works under his charge for the fiscal year ended 30th June, 1888.

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

HENRY F. PERLEY,
Chief Engineer.

A. GOBELL, Esq.,
Secretary, Public Works Department,
Ottawa.

OFFICE OF THE ST. MAURICE RIVER WORKS,
THREE RIVERS, 24th July, 1888.

SIR,—I have the honour to submit for the information of the Honourable the Minister of Public Works, the following report on the works under my charge during the fiscal year which expired on the 30th of last June.

The quantity of logs cut this year will not reach 200,000. The drive is not yet completed but continues in a satisfactory manner. Spring has been very backward and for that reason the whole number of logs is not yet in the booms.

The breaking up of the ice although the water was very high for a long period has not caused much damage, owing to the increased staff employed to ensure the safety of the works, on account of which the amount allowed for maintenance has been over-expended.

The amount authorized for repairs was.....	\$11,925 57
Of which we expended.....	9,945 78

Leaving an unexpended balance of.....	<u>\$ 1,979 79</u>
---------------------------------------	--------------------

The amount authorized for maintenance was.....	\$15,000 00
And the amount expended was.....	17,675 71

Making an excess of expenditure of.....	<u>\$ 2,675 71</u>
---	--------------------

The expenditure authorized and actually incurred may be stated as follows:—

Expenditure for maintenance.....	\$17,675 71	
do repairs.....	9,945 78	
	<u>27,621 49</u>	\$27,621 49

Amount voted for maintenance.....	\$15,000 00	
do repairs.....	11,925 57	
	<u>26,925 57</u>	26,925 57

Over expenditure beyond the two amounts authorized notwithstanding the best exertions.....		<u>\$ 695 92</u>
---	--	------------------

The alterations made last year to the booms of Cap à Corneille will be very advantageous. All parties interested are highly satisfied and consider that these booms are the safest of all the booms on the St. Maurice; although seventy-five thousand logs were received within the booms in the course of twenty-four hours their enormous pressure did not appear to affect their stability, in the least. The safety of these booms, however, can be still further increased by the removal of eight old piers, and by using the stone and iron therein for the construction of four new piers at more eligible points.

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

CHAS. LAJOIE,

Superintendent.

H. F. PERLEY, Esq.,
Chief Engineer, Department Public Works,
Ottawa.

BRIEF DESCRIPTION OF REPAIRS MADE.

ENTRANCE OF THE ST. MAURICE.

1. Raising a small pier 3 feet higher and sheathing same with 3 inch deals.
2. Raising pier No. 11 one foot in height, and sheathing the same with 3 inch deals.
3. Raising of pier No. 12 one foot higher, 60 by 10 feet, and sheathing same with 3 inch deals.
4. Pier No. 15 raised 3 feet higher and sheathed on four sides; 16 fenders placed.
5. Ile Caron. A pier of 40 by 12 feet demolished and replaced by two other piers of 16 by 25 by 15 in height, sheathed on 3 sides.
6. Head of Ile Caron. Removal of a shoal and filling up a portion which was undermined with 333 yards of stone and brush.
7. Placing 30 fenders and 13 mooring posts on different piers.
8. Six mooring posts placed on bank for the safety of Cap à Corneille booms.
9. Two large pieces of iron for securing the inch and a quarter chains.
10. Demolition of three large piers above low water.
11. One thousand feet of old booms planked with 3 inch deals.

SHAWENEGAN.

1. Building of pier 35 feet long, 28 feet high, and 18 feet wide to strengthen the slide pier.
2. Rebuilding 2 mooring piers on the island, 12 by 12 feet square and 6 feet high.
3. Rebuilding 2 piers on the line of the slide booms, 12 by 12 feet square, and 8 feet high.
4. Making 138 feet of side-railing on the pier at end of slide.
5. One boat, 24 by 7½ feet.
6. Construction of a dyke 186 feet long and 9 feet high.
7. Construction of a dyke 50 feet long and 9 feet high.
8. Construction of a dyke 60 feet long and 9 feet high.
9. Building a pier of 25 by 25 feet square, and 18 feet high at head of falls.
10. Placing 100 feet square timber on dam at head of falls.
11. Placing 50 feet of 8 inch timber lining inside of slide.

SHAWENEGAN BAY.

1. Converting 1,029 feet of three ply pine booms into single stick booms on the shoal.

-
2. Slight repairs to piers Nos. 1, 2, 3, 4, 6, 8, 9, 10, 12 and 13.
 3. Renewing the face timbers of the wharf opposite the slide-keeper's residence for a length of 150 feet, a height of 16 feet, and a width of 10 feet at bottom. Protecting the base of the wharf with a layer of stone 3 by 2½ feet.
 4. Depositing 5 toises of stone ballast in different portions of wharf constructed last year.
 5. Rebuilding and widening sidewalks for an extent of 170 feet.
 6. Planking 1,430 feet of 5 feet ply booms with 3 inch spruce deals.
 7. Construction of a small house 14 by 10 feet for the keeper of the gate at the lower end of retaining boom.

GRAND MÈRE.

1. Covering 200 feet of 3 feet ply booms with 3 inch deals.

GRANDES PILES.

1. Repairs to piers Nos. 4, 5, 6, 7 and 9.
2. Removal of the station house to the high ground in rear
3. Repairs to house.
4. Construction of a shed 36 by 20 feet.

APPENDIX No. 10.

—
REPORT

ON THE

Ottawa District Slides and Booms,

FOR THE FISCAL YEAR ENDED 30TH JUNE, 1888.

BY

HENRY F. PERLEY, Chief Engineer,

AND

GEO. P. BROPHY, Superintending Engineer.

APPENDIX No. 10.

SLIDES AND BOOMS—OTTAWA DISTRICT.

Ref. No. 91,536.

CHIEF ENGINEER'S OFFICE,
OTTAWA, 2nd October, 1888.

SIR,—I transmit herewith the annual report by Mr. G. P. Brophy, Superintending Engineer on the works under his charge on the Ottawa River and its tributaries, for the fiscal year ended 30th June, 1888.

I have the honour to be, Sir,

Your obedient servant,

HENRY F. PERLEY,
Chief Engineer.

A. GOBBIL, Esq.,
Secretary Public Works Department.

OTTAWA, 27th July, 1888.

SIR,—I have the honour to submit the following report on the works under my charge on the Ottawa River and its tributaries, for the fiscal year ended 30th June, 1888.

Shortly after the spring floods of 1887, the waters of the Ottawa and tributary streams attained a low summer level after which a protracted period of drought set in, which had the effect of completely drying up many of the creeks and decreasing the volume of water in the Ottawa and its affluents to an extent never before witnessed by the oldest inhabitants, and altogether unparalleled in the history of rafting operations in this district. Such being the case, the late "drives" of logs and timber were abandoned for the season. Great difficulty was experienced on many of the streams in protecting the works from the ravages of bush fires which spread to an alarming extent, and on the Madawaska the exposed portions of certain dams were damaged. At the close of the season of navigation the foundations of the works, which in most places were dry and exposed, and therefore easy of access, were thoroughly examined and defects made good.

The work under the heading of repairs, reconstruction and construction, was carried out during the recess as follows:—

ON THE MAIN OTTAWA RIVER.

Carillon Station.

The slide aprons at the head and foot were overhauled, and special provision made for adapting them to the varying pitches of water and holding them in position, by placing jam-nuts on the hoisting screws.

Hull or North Chaudière Slide.

The bottom timbers and side piers were repaired and the boom timbers strengthened; the bridge planking and railing renewed and repaired, and the approaches kept up.

The Roadway.

The roadway between Hull Bridge and the Union Suspension Bridge was cleaned, graded up and levelled, and received coatings of gravel and stone, while the guard walls, railings and sidewalks were repaired.

The Union Suspension Bridge.

Had its approaches made up and macadamized; the cables and attachments cleaned and painted, and the toll house and outbuildings repaired.

Ottawa or South Chaudière Station.

The slides, piers and booms at this place had new timbers and plank inserted where the old ones had become worn and decayed; the bulkheads and platforms replanked; the general storehouse extended and sub-divided; the fences made more secure, and the slide master's house re-roofed and repaired. The iron bridges across the slide and hydraulic channels had their braces and tension rods adjusted, and the roadway planking for the most part renewed in hardwood.

The Dufferin, Sappers and Maria Street Bridges.

The bridges over the Rideau Canal in this city, had their roadway planking repaired, and portions of the iron and stonework where defective, made good.

Chats Station.

At this place the side piers of the canal entrance above the slide, were undermined and dug into at the curve, by the friction of the passing logs and timber. It was necessary to face up these piers and to renew and strengthen portions of them, as also to renew and repair sections of the bottom planking and foundation timbers, as well as to reconstruct a bulkhead that had been wrecked by the hull of a boat passing through the slide.

Portage du Fort Station.

At this place the guide boom and its supports at the slide entrance were repaired and strengthened and the bottom planking patched.

Rocher Capitaine Station.

The side piers of the slide were repaired and the foundation timbers blocked up and levelled. The channel above the slide entrance was cleared of projecting rocks which interfered with the passage of timber.

TRIBUTARIES OF THE OTTAWA.

Gatineau River.

The canals and channels through which the logs, &c., pass to the safety pond and rafting stations were cleared of debris and the floating stages at the sorting gaps enlarged and improved, and on account of the shifting quicksands encroaching on the boomage space, anchors had to be provided for mooring portions of the boom in a new position. The shoving of the ice having damaged some of the main support piers in their timbers and stone filling, these had to be repaired; and at places where the current had scoured the sand and partially undermined the foundations of piers, buttress timbers and filling had to be used as supports.

Madawaska River.

The spring floods of 1887, caused quite a number of breaks in the series of river improvements, consisting of dams, piers, booms and slides on the upper reaches of the stream, between Chain Rapids and Springtown, and these were repaired and the damage made good at the low water season. At Springtown booms, Flat Rapid dams, the

Arnprior slide and the retaining boom and support piers at the mouth of the river, extensive repairs had to be done as these works had been damaged by the high water and moving ice, and at some of the upper stations by the spread of fire.

Coulonge River.

The ordinary repairs incidental to the season's business were carried out during the autumn and winter months at the lower stations, and at Ragged Chute, further up stream, a dam which had its longitudinal and finger timbers, and sheet covering very much wrecked and torn up, was put in working order for the season of 1888.

Black River.

The slide and guard pier at High Falls on this stream were strengthened and repaired and the boom fastenings and chains overhauled. The pitch of this slide being so steep it is with the greatest difficulty, during the spring freshets, that logs can be governed and fed at the head gates, so that the sides and bottom may not be battered as the pieces descend. The main dam here was also reconstructed.

Petewawa River.

The line of dams and piers between Trout and Cedar Lakes on the upper reach of the stream were very much damaged by the spring floods and moving ice, more especially in 1887, and as these works have been in existence upwards of 20 years, and are spread over a distance of about 25 miles of the river and follow each other in close succession, their maintenance involved a considerable outlay. The long slides at and above Lake Traverse were also patched and at Crooked Chute lower down stream, the slide and booms had to be strengthened. On the lower reach, the slides and dams at Boisdur and the first, second and third Chutes were stanchied and repaired, and the retaining boom and piers at the mouth of the river strengthened.

Dumoine River.

On this stream, in addition to certain small repairs at the High Falls slide, the dam which had been partially shattered by the high water was repaired by the insertion of new timbers and sheeting where required.

RECONSTRUCTION.

The works carried out under this head consisted of the rebuilding of dams and boom piers on the Coulonge and Black Rivers that had been wrecked by the ice and spring floods, and the making good of damage at the Mountain and Calumet Stations on the Ottawa River that had been caused by the displacement of portions of the side piers of the slides through ice shoves and the action of the very high water.

CONSTRUCTION.

The only new works performed were those in connection with the new booms and anchor support piers that were placed near the head of Calabogie Lake, an expansion of the Madawaska River, with the view of giving facilities to the owners of logs destined for local mills to separate them from the general drives on that stream.

The waters of the Ottawa and tributaries as already stated were abnormally low during the autumn months of 1887, and were comparatively so all last winter, but as there was a heavy aggregate snowfall and a great thickness of ice on the lakes and feeders of the main Ottawa River to the north of the Temiscamingue and Keepawa regions, the "north-water" as it is called, came down in great volume after the local freshets and floods from the more southerly tributaries had run off, and as the spring break up in these remote parts was at a later date than usual, a most favourable opportunity was afforded for rafting and timber driving operations, so much so that up to the end of the period covered by this report the great bulk of the logs, &c., might be considered safely within reach of their destination, and I am glad to be able to say

that the damage sustained by the works under my charge was not much above the average. The following statement furnished on the authority of the collector of slide dues in this city, shows the number of pieces of timber and saw logs that passed these works and the amount of revenue accrued thereon as tolls during the fiscal year:—

	Pieces.
White pine timber.....	20,489
Red do	12,927
Boom and dimension timber.....	35,144
Cedars.....	14,493
Round.....	3,372
Tamarac.....	1,271
Spruce.....	651
Oak	13
Ash.....	21
Elm.....	5
Basswood.....	6
Sawn traverses.....	18
23,517 railway ties, equal in flat timber to.....	2,910
Sawlogs.....	3,102,798

The revenue accrued was \$61,588.79.

In respectfully submitting the above,

I have the honour to be, Sir,

Your obedient servant,

GEO. P. BROPHY,
Superintending Engineer, O. R. Works.

HENRY F. PERLEY, Esq.,
Chief Engineer of Public Works.

APPENDIX No. II.

REPORT

ON THE

NEWCASTLE DISTRICT SLIDES AND BOOMS.

BY

HENRY F. PERLEY, Chief Engineer,

AND

R. B. ROGERS, Superintending Engineer.

APPENDIX No. II.

SLIDES AND BOOMS—NEWCASTLE DISTRICT.

Ref. No. 91,547.

CHIEF ENGINEER'S OFFICE,
OTTAWA, 2nd October, 1888.

SIR,—I transmit herewith a report by Mr. R. B. Rogers, Superintending Engineer, River Trent and Newcastle District Works, on the works under his charge, for the fiscal year ended 30th June, 1888.

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

HENRY F. PERLEY,
Chief Engineer.

A. GOREIL, Esq.,
Secretary Public Works Department,
Ottawa.

TRENT CANAL WORKS, ENGINEER'S OFFICE,
PETERBOROUGH, 1st September, 1888.

SIR,—I have the honour to submit the following report on the works under my charge for the fiscal year ended 30th of June, 1888.

The water in this district from 1st July stood at a fair average height. The spring freshet passed without doing damage to any considerable extent. Navigation closed about 25th November and opened again 20th April.

The repairs executed at the different stations were as follows:—

FENELON FALLS.

New stop logs were supplied for the slide.

SCUGOG RIVER.

A light was kept on the lighthouse at the mouth of the river which has proved of great benefit to navigation. The snags were removed from the navigation channel.

BUCKHORN.

A pier was constructed to support the boom leading to the slide. The lower part of the apron was repaired.

KATCHEWANNOE LAKE.

The boom separating the navigation channel from the timber channel was broken by the action of the ice. This was repaired. This boom has been of great benefit to the lumbermen as well as to the steamboat owners.

PETERBORO'.

The apron, together with the joists of the west sluice, were taken out by the ice. These were temporarily repaired. The eastern pier in the lake, the top of which was taken off by the ice, was repaired.

[1888]

OTONABEE RIVER.

Good work was done in removing the boulders from the shoals at "Yankee Bonnet" and Robinson's Island and a fair channel has been obtained. No work was done at removing the sawdust from the channels either at the mouth of the river or at Peterboro', for which at both places there was an appropriation, owing to the fact that the lumbermen persist in depositing sawdust in the river. As I have mentioned in former reports, the river is fast filling up with sawdust, and even now at points the channels have been rendered impassable with it. Three piers were constructed at the mouth of the river for the purpose of attaching a boom to. This boom is for keeping a free passage for navigation when timber is passing.

HASTINGS.

The floor of the slide and the pier below, which forms one of the retaining walls of the slide were repaired.

TRENT RIVER.

Work was done at removing the boulders from the shoals about two miles below Hastings.

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

RICHARD B. ROGERS,
Superintending Engineer.

H. F. PERLEY, Esq.,
Chief Engineer, Department Public Works.
Ottawa.

APPENDIX No. 12.

STATEMENT OF STAFF EMPLOYED

ON THE

SLIDES AND BOOMS

THROUGHOUT THE DOMINION.

APPENDIX No. 12.

STATEMENT showing Names, Dates of Appointment, Salaries, &c., of persons employed on the different Slides and Booms.

Name.	Position.	Where Employed.	Date of Appointment.	Salary.	Remarks.
<i>Saguenay District.</i>					
Arthur Boulanger.....	Superintendent.....	Saguenay.....	19th May, 1881	475 00 per annum.....	
Calixte Fortin.....	Asst Superintendent	do	13th do 1881	30 00 p'r month.....	
<i>St. Maurice District.</i>					
Charles Lajoie.....	Superintendent.....	Three Rivers	7th Oct., 1878	1,200 00 per annum.....	
J. B. Normand.....	Asst Superintendent	Mouth St. Maurice	12th April, 1858	3 00 per day	
N. Dagueau.....	Paymaster.....	Three Rivers.....	1st Aug., 1886	50 00 per month	
Cyrac Lymburner.....	Foreman	Mouth St Maurice	25th April, 1881	585 00 per annum	
Jos. Paze	Boom Keeper.....	Cap aux Cornilles	10th Dec., 1879	452 50 do	
Arthur Rousseau.....	Deputy Slide Master	Shawenagan	12th April, 1858	3 00 per day	
Louis St. Onge	do	do	24th July, 1885	365 00 per annum	
Charles Langlois	Forman	do	13th Jan., 1880	441 00 do	
Theophile Larue.....	Boom Keeper.....	Grand Mère	15th March, 1872	2 00 per day	
Frs. Lacroix.....	Asst. Boom Keeper.	do	1st April, 1866	463 00 per annum	
Arthur Bellerin.....	Boom Keeper.....	Les Ges	5th Aug. 1885	365 00 do	
<i>Richelieu District.</i>					
Azarie Bienvenue.....	Boom Master	Belœil Station	1st June, 1892	100 00 per annum.....	
<i>Ottawa District</i>					
G. P. Brophy	Superintendent.....	Ottawa.....	6th July, 1873	2,500 00 per annum	
D. Scott.....	Accountant.....	do	1st Oct., 1854	1,500 00 do	
J. H. Scott.....	Measurer & Draughtsman	do	1st Nov., 1882	2 50 per day.....	

APPENDIX 11.—STATEMENT showing the Names, &c., of persons employed on the different Slides and Booms—*Conclude.*

Name.	Position.	Where Employed.	Date of Appointment.	Salary.	Remarks.
<i>Ottawa District—Con.</i>					
W. Kane	Messenger.....	do	1st Aug, 1867	\$ 1 25 per day.	Employed about the works for 20 or 25 years.
Moses Aubry.	Foreman Carpenter.....	do .....	.....	800 00 per annum	Actively employed about 7 months.
Pierre St. Pierre.	Deputy Slide Master.....	Carillon.....	21st April, 1885	1 25 per day	Actively employed about 7 months. Oversees
D. Noonan	Boom Master.....	Gatineau.....	21st March, 1878	500 00 per annum ...	repairs in winter.
W. J. McDonald.....	Deputy Slide Master	Chaudière.....	25th April, 1876	635 00 do	Paid during the season of navigation only, about
J. Soutère	Asst. do	do .....	.....	2 00 per day.....	7 months. Attends to winter repairs
J. McDonald.....	Deputy Slide Master	Hull.....	1st March, 1877	1 25 do	Employed about 6 months.
D. McFarlane.....	Slide Master.....	Chats	27th do 1860	480 00 per annum ...	Employed about 6 months during navigation.
John Harvey	do	Arnprior.....	12th July, 1882	2 50 per day.....	Looks after repairs in winter.
Jos. McCrea.....	Boom Master	Springtown.....	15th May, 1880	200 00 per annum ...	Employed about 3 months during the season of
Patrick Barry	Acting Deputy Slide Master.....	High Falls, Madawaska.....	10th March, 1888	3 00 do	navigation.
Duncan McLaren	Deputy Slide Master	Portage du Fort... ..	7th Sept, 1881	456 25 do	Employed 4 or 5 months during the season of
J. G. Poupore	Slide Master	Black River.....	15th Oct, 1880	480 00 do	navigation. Looks after repairs in winter.
James S. Rowan	do	Lower Petewawa.....	18th March, 1887	300 00 do	Employed about 4 months
Wm. Thompson.....	do	Mountain.....	10th Oct, 1879	1 25 per day.....	passing timber. Looks after repairs in winter.
D. Carmichael.....	do	Calumet.....	— Aug, 1848	40 00 per month.....	Actively employed about 4 months during
A. Proudfoot	do	Coulange.....	1st April, 1866	1 60 per day.....	season of navigation. Looks after repairs
Hugh Corley	do	Upper Petewawa.....	1870	2 00 do	in winter. Actively employed about 6 or 7 months during
					season of navigation. Looks after repairs
					in winter. Actively employed about 4 months. Looks after re-
					pairs in winter.
					Employed 3 or 4 months each year.

	do	Joschim	6th Nov., 1871	£60 00 per annum	Employed about 4 months passing timber. Looks after repairs in winter.
A. McDougall	Room Master	Dumoine	24th April, 1882	1 50 per day	Employed during timber season.
Jos. Dufault	Deputy Slide Master	do	12th do 1872	300 00 per annum	Employed during navigation about 3 months. Will inspect works if required.
Hugh Grant	Slide Master	Rocher Capitaine	1st May, 1874	480 00 do	Employed during navigation, about 3 months. Will inspect works if required.
A. McEwen	Deputy Slide Master	Cheneaux	1865	2 50 per day	Paid during season of navigation only, about 7 months. Attends to winter repairs.
A. H. Johnson	Asst. Deputy Slide Master	do	1873	1 75 do	Paid during season of navigation only, about 7 months. Attends to winter repairs.
G. J. Johnson	Superintendent	Peterboro'	1st July, 1884	600 00 per annum	Receives also \$600 per annum from Department of Railways and Canals.
Newcastle District.	Clerk, Supt's Office	do	do 1882	300 00 do	Receives also \$300 per annum from Department of Railways and Canals.
R. B. Rogers	Slide Master	Chisholm's Rapids	1st April, 1883	200 00 do	
G. H. Giroux	do	Fenslon Falls	do 1883	200 00 do	
Robert Armstrong	do	Heely's Falls	do 1878	200 00 do	
John Ineram	do	Buckhorn	1st May, 1879	100 00 do	Receives also \$150 per annum from Department of Railways and Canals.
H. Descon	do				
W. E. Hall	do				

Saguenay Works—In addition to the Superintendent, there are employed on the Saguenay works 4 flagmen, at 70 cents per day each during the passing of the logs through the slides, which lasts one or two months.

St. Maurice Works—Every year during the timber running season, the officers in charge of the various stations employ 25 or 30 men during three or four months, at the rate of 80 cents to \$1.10 per working day, inclusive of 40 to 50 cents per day per man, paid for board to the Deputy Slide Masters and Boom-keepers; also one clerk and foreman, at \$1 per day, two watchmen and one gate-keeper.

Ottawa River Works—In addition to the above officers, &c., there are employed during the running season, one foreman on slide, at \$1.50, and one assistant foreman, at \$1.25 per day; also, 25 to 30 laborers, at from \$1 to \$1.40 per working day.

R. STECKEL.

APPENDIX No. 13.

REPORT

ON

GOVERNMENT TELEGRAPH LINES,

FOR THE FISCAL YEAR ENDED 30TH JUNE, 1888.

BY

F. N. GISBORNE, Superintendent.

APPENDIX No. 13.

REPORT ON GOVERNMENT TELEGRAPH LINES.

Ref. No. 91,794.

OTTAWA, 30th August, 1888.

SIR,—I have the honour to submit the following report upon the Telegraph Service for the twelve months ended 30th June, 1888, with the usual tabular statements of lines, operating staff, &c., established in the several districts.

I have the honour to be, Sir,

Your obedient servant,

F. N. GISBORNE,

Superintendent.

A. GOBEL, Esq.,
Secretary, Public Works Department.

TELEGRAPH SERVICE—1887-88.

NEWFOUNDLAND.

The line between Cape Ray and Port au Basque was maintained and operated as in previous years, under an agreement made with the Anglo-American Telegraph Company, at the usual cost of \$250.

MARITIME PROVINCES.

The several telegraph systems in the Maritime Provinces were operated satisfactorily under the same arrangements as in previous years.

The Meat Cove Line was partly reposed during the autumn of 1887, by the District Superintendent, Mr. R. T. Clinch, St John, N. B., and the S.S. "Newfield" was employed in October in laying two short sections of heavy cable across the channels at St. Annes and Ingonish, for the purpose of facilitating the maintenance of the line in those localities; under a further appropriation made in connection with this line, the remainder of it will be reposed during the present season.

The revenue and expenditure figures of the lines in the Maritime Provinces are as follows:—

	Revenue.		Expenditure.	
	1886-87	1887-88	1886-87	1887-88
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Escuminac Line	132 78	109 41	424 16	417 04
Meat Cove Line	3,282 27	973 06	1,828 65	2,068 64
Low Point Line			50 00	50 00
Cape Sable Line	113 86	82 98	291 81	189 06
Bay of Fundy Lines.....	635 73	716 33	1,114 77	1,097 74
Cheticamp Line.....	68 27	200 62	193 06	686 98

RIVER AND GULF OF ST. LAWRENCE.

The only interruptions that occurred in the telegraph systems operated in the River and Gulf of St. Lawrence districts were in connection with the Magdalen Islands. The cable between Grosse Isle and Bird Rock was interrupted on the 24th April, and the cable between Meat Cove, C. B., and Coffin Island was interrupted on the 14th June. The period of interruption was somewhat protracted in consequence of the SS. "Newfield" not being immediately available for repairs. The vessel was however made ready at the end of July, and communication was re-established between Meat Cove and the Magdalen Islands on the 13th instant (August, 1888), and with Bird Rock one week later.

On the north shore St. Lawrence, the line between Godbout and Moisie River was, early in the winter, cleared throughout of fallen trees, which had gradually accumulated since the line was originally constructed, and rendered the route almost untraversable for repairing purposes. A clear pathway was made, and the work of making repairs to the line, when required, has thereby been greatly expedited. Material was procured for a further extension of the line beyond Birch River, but in consequence of the season being far advanced before arrangements could be completed, it was decided to postpone further action until the present season.

The Grosse Isle quarantine cable was, as in former years, picked up in November, and it was decided that instead of relaying it in the spring, the connection would be made between Orleans Island and Grosse Isle by means of a land line on Ile aux Reaux and two short cables connected therewith. An arrangement was accordingly made with Mr. Narcisse Roberge, the proprietor, for the establishment of a land line and telegraph office on Ile aux Reaux, and communication with Grosse Isle was restored on the 20th June. With a view to effecting a permanent connection with the quarantine station, the shore ends of these short cables have been cemented in channels down to low water mark, and it is expected the necessity for picking up and relaying these cables every season will, under the present conditions, be obviated.

The revenue and expenditure figures of the lines in the River and Gulf St. Lawrence are as follows:—

	Revenue.		Expenditure.	
	1886-87	1887-88	1886-87	1887-88
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Anticosti Lines	533 64	471 02	1,680 49	1,739 75
Magdalen Islands Lines	394 78	608 04	1,810 72	2,416 74
North Shore, St. Lawrence and Chicoutimi Lines	2,230 92	2,354 60	6,800 00	6,120 42
Quarantine Line	177 96	213 08	519 06	551 61

ONTARIO.

The land line and cable connecting Amherst Island by telephone with the telegraph office at Bath continued without interruption during the year. The revenue was \$81.58, and the expenditure \$76.48.

On the 19th September, 1887, a line, 56 miles in length, was completed and put in operation between Colpoy's Bay, near Wiarton, and Tobermory, Ont., by the Great North Western Telegraph Company for a bonus of \$5,600, under an agreement stipulating for its maintenance in perpetuity. The revenue of this line accrues to the company.

NORTH-WEST TERRITORY.

The repoling of the lines between Battleford and Humboldt, begun early in the season of 1886-87, as stated in my last annual report, was done by days' labour and was completed on the 17th October, 1887, and the partial repoling of the Qu'Appelle—Humboldt section, was done under contract by Mr. J. Carson on the 11th October, 1887. Further appropriations having been made for reconstruction purposes during the present summer, the Qu'Appelle—Humboldt section is now being completed, and the line between Clarke's Crossing and Prince Albert is also being repoled throughout; the contracts and arrangements for the work being as follows:—

Qu'Appelle—Humboldt Section.

A. C. Vaughan, extension of contract of April, 1887, 2,130 cedar poles at \$1.45.....		\$3,088 50
Thompson & Nelson, distribution of poles.....	\$358 77	
R. Johnston do	371 76	
G. Goldie do	139 00	
H. McIntosh do	328 35	
		—————\$1,197 88
E. Gundry, erection of poles, contract limited to.....		800 00

The poles have been distributed, and Mr. Gundry is now carrying on the work to completion.

Prince Albert Line.

B. Boyer, contract May, 1888, supply and distribution 2,492 tamarac poles at \$1.25; 2 masts at \$30—\$3,175.

Work of erection of the poles is being performed by days labour, under the supervision of the District Superintendent.

Fifty poles have also been procured for the Wood Mountain line to replace as many damaged by lightning. This line is in good condition.

The revenue and expenditure figures of the North West lines are as follows:—

	Revenue.		Expenditure.	
	1886-87.	1887-88	1886-87.	1887-88.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
North-West lines.....	8,841 69	6,688 22	16,693 57	23,264 93

BRITISH COLUMBIA.

The Ladner's Landing branch line, 18 miles in length, was leased, under date 28th October, 1887, to Messrs. J. A. Laidlaw and Jas. Wilson, the lessees agreeing to maintain the line permanently without cost to the Government.

The line from Ashcroft to Barkerville, 276½ miles, is operated by the Canadian Pacific Railway Telegraph Company for the Government, under an agreement as arranged in the previous year.

RECAPITULATION.

(Exclusive of lines in the North West Territories.)

—	Expenditure.	Revenue.	Remarks.
	\$ cts.	\$ cts.	
Gulf of St. Lawrence and Maritime Provinces :—			
Anticosti Island.	1,739 75	471 02	Signal Service and Meteorological Service messages being transmitted free of charge.
Magdalen Islands (including Meat Cove line).....	4,485 38	1,481 10	
Cheticamp—Mabou.....	686 98	200 62	
Cape Sable—Barrington.....	289 06	82 98	
Chatham—Escuminac.....	417 04	109 41	
Grosse Isle Quarantine.....	551 61	213 08	
Bay of Fundy.....	1,097 74	716 33	
North Shore, St. Lawrence.....	6,120 42	2,354 60	
Subsidies, stationery, line and office material, cable repairs and contingencies chargeable to special appropriation for Gulf lines.....	7,148 98		
	22,536 96	5,629 14	
Ontario—Bath—Amherst Island line.....	76 48	81 58	
Total.....	22,613 44	5,710 72	
Total figures for 1886-87 were.....	19,753 01	7,647 13	

NOTE.—The revenue herein reported for each year represents the net traffic receipts for the 12 months, July to June, inclusive. In the Departmental and other statements the figures for telegraph revenue comprise only such amounts as have come to hand during and up to the close of the fiscal year. It will therefore be understood how it is that the several accounts do not exactly agree.

F. N. GISBORNE,
Superintendent Government Telegraph Service.

GOVERNMENT TELEGRAPH SERVICE.
NEWFOUNDLAND TELEGRAPH SYSTEM.

No.	STATIONS.	Intermediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	Memo.
		Miles.		\$ cts.		
1	Port au Basque.....	0	.....	50 00 or com'n.....	.....	N.B.—The commission is 25 per cent. upon all business to and from the office; said commission guaranteed not to be less than at the rate of \$50 per annum.
2	Cape Ray Lighthouse.....	14	.....	50 00 do ..	.....
Totals		14		100 00		

Cost of land line, \$1,763.36; interest thereon at 5 per cent., say \$ 90 00
 Estimated annual maintenance and repairs..... 160 00

Total \$ 250 00 Required in Estimates, 1888-89.

N.B.—The above short line is constructed in connection with the Signal Service, and connects at Port au Basque with the land line system of the Anglo-American Telegraph Company.

ANTICOSTI TELEGRAPH SYSTEM,
ANTICOSTI ISLAND SERVICE.

STATIONS.	Inter- mediate Distances.	Operators.	Salaries per annum.	Date of Appointment.	Memo.
1 Fox Bay.....	Miles. 0	H. Strange.....	\$ etc. 50 00 or com'n.....	Nov. 1, 1887	N.B.—The commission is 25 per cent. upon all business to and from the office; and commission guaranteed not to be less than at the rate of \$50 per annum.
2 Heath Point Lighthouse.....	23	T. Gagné.....	do	July 20, 1881	
3 South Point Lighthouse.....	32½	W. Carter.....	do	do 27, 1881	
4 Shallop Creek.....	17½	B. Bradley.....	do	do 7, 1881	
5 Salt Lake.....	57½	F. Denault.....	360 00 do	Oct. 19, 1881	General Repairer. Plus \$1 per day when absent on duty.
6 South-West Point Lighthouse	15	Miss G. Pope.....	200 00 do	Oct. 18, 1880	Chief Operator since 1st August, 1882.
		E. Pope.....	100 00 do	Aug. 1, 1882	District Superintendent. Plus \$1 per day when absent on duty.
7 Jupiter River.....	7	.....	do	.....
8 Otter River.....	17½	.....	50 00 do	.....
9 Beesie River.....	22	M. Duguay.....	50 00 do	Oct. 1, 1886	
10 Cape Eagle (Ellis Bay).....	10	.....	do	.....
11 West Point Lighthouse.....	14	A. Malouin.....	50 00 do	Aug. 1, 1881	NOTE.—A special allowance for maintenance of office, \$50 per annum, has been added to the commission for offices marked *, since September, 1887.
12 English Bay.....	3	F. Cabot.....	50 00 do	July 1, 1882	
Total.....	214		1160 00		

GOVERNMENT TELEGRAPH SERVICE—Continued.

ANTICOSTI TELEGRAPH SYSTEM.
GASPÉ.

No.	STATIONS.	Inter- mediate Distances.	Operators.	Salary per annum.	Date of Appointment.	Memo.
1	L'Anse à Fougère.....	Miles. .....	.....	\$ cis. 50 00 or com'n.....	.....	N.B.—The commission is 25 per cent. on all busi- ness to and from the office; said commission guaranteed not to be less than at the rate of \$50 per annum.
2	Gaspé Basin.....	23 23	J. J. Annett.....	150 00 200 00	Oct. 16, 1881...	

ESTIMATED COST OF ANNUAL MAINTENANCE OF ANTICOSTI SYSTEM.

Land lines—Salaries and repairs.....	\$3,000 00
Cables—Repairs, say.....	1,000 00
Total.....	\$4,000 00
Less—Revenue, probably.....	500 00
Balance deficit.....	\$3,500 00

MAGDALEN ISLANDS TELEGRAPH SYSTEM.
MAGDALEN ISLANDS SECTION.

STATIONS.	Inter- mediate Distances.	Operators.	Salaries per annum.	Date of Appointment	M.E.M.O.
1 Amberst	Miles. 0	Miss J. Shea	\$ cfs. 50 00 or com'n.	Oct. 1, 1882	N.B.—The commission is 25 per cent. on all busi- ness to and from the office; said commission guaranteed not to be less than at the rate of \$50 per annum.
2 Amberst Lighthouse	9	Wm. Cormier	50 00 or com'n.	June 11, 1881	Plus \$30 per annum for rent. General line repairer.
3 Etang du Nord Village	15	P. Pelletier	400 00	Dec. 1, 1881	2-wire loop.
4 do Lighthouse	1	T. O'Brien	50 00 or com'n.	do 1, 1881	
5 Cap aux Meules .....	.....	W. Leslie	50 00 or com'n.	Aug. 9, 1883	
6 House Harbour	8	.....	50 00	.....	House Harbour Agency discontinued since July, 1887, arrangements are being made to re-open the office as soon as practicable.
7 Wolfe Island	28½	.....	100 00	.....	Wolfe Island Office was closed in May, 1888.
8 Grosse Isle	11	A. LeBourdais, D. Supt.,	500 00	Aug. 17, 1880	Plus \$1 per day when absent on duty.
9 Bird Rock	Cable	T. Turbide	50 00 or com'n.	do 20, 1881	
10 Grand Entry	11	Miss McPhail	50 00	Feb. 18, 1882	
Totals	83½		1,350 00		

ON

[1888]

MAGDALEN ISLANDS TELEGRAPH SYSTEM.
CAPE BRETON SECTION.

STATIONS.	Inter- mediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	MEMO.
1 Meat Cove (Cable Station)...	Miles. 0	A. B. McDonald	\$ cts. 420 00	Nov. 7, 1880	N.B.—The commission is 25 p. c. upon all business to and from the office; said commission guaranteed not to be less than at the rate of \$50 per annum.
2 Appy Bay	10½	R. G. Zwicker	50 00 or com'n.	Aug. 1, 1882	
3 Neil's Harbour (4-way house loop line)	15 1½	M. McLeod	50 00 do	April 1, 1887	
4 Ingonish, North Bay	9	J. M. Burke	360 00 do	do 1, 1882	General repairer.
5 Ingonish Harbour	10½	.....	50 00 do	.....
6 Indian Brook	23	D. McLennan	50 00 do	April 1, 1883	
7 St. Anne's, South Bay	19	Miss C. Morrison	50 00 do	do 1, 1884	N.B.—This section is at present operated and maintained by the Western Union Telegraph Company, but at the cost of the Government. The agreement is for ten years (expiring 18th April, 1891), but can be cancelled on one year's notice.
8 Baddeck (Loop Line)	13	Miss Dunlop	50 00 do	Jan. 1, 1882	
9 Englishtown	6	Miss Bingham	50 00 do	July 19, 1882	
10 Kelly's Cove (N. Campbellton)	2	Miss M. C. Campbell	50 00 do	April 1, 1885	
11 Big Bras d'Or	6	.....	50 00 do	.....
12 North Sydney	12½	.....	.....	.....
Totals	128½		1,230 00		

ESTIMATED COST OF ANNUAL MAINTENANCE OF MAGDALEN ISLAND SYSTEM.

Local lines. Salaries and repairs	\$4,100 00
Cable. Repairs, say	1,000 00
Total	\$5,100 00
Less probable revenue	1,400 00
Balance deficit	\$3,700 00

NOVA SCOTIA TELEGRAPH SYSTEM.
CAPE SABLE SECTION.

No.	STATIONS	Inter- mediate Distances.	Operators.	Salaries. per Annum	Date of Appointment.	Memo.
		Miles.		\$ cts.		
1	Barrington.	0	W. U. Tel. Coy.'s Agent.	50 00 or com'n....	Dec. 18, 1883	N. B.—The commission is 25 p. c. upon all business to and from the offices; said commission guaranteed to be not less than at the rate of \$50 per annum.
2	Newelltown (including 1½ miles cable).....	11	Miss S. J. Newell.....	50 00 do ...	do 22, 1883	
3	Cape Sable Island Lighthouse (including ¼ mile cable)....	6¼	I. K. Doane.....	50 00 do ...	do 18, 1883	
	Totals.....	17¼		150 00		

Estimated cost of annual maintenance:—

Required in Estimates for 1888-89	\$300 00
Estimated revenue do	150 00

GOVERNMENT TELEGRAPH SERVICE—Continued.

LOW POINT, CAPE BRETON SECTION.

No.	STATIONS.	Inter- mediate Distances.	Operators.	Salaries per Annum.	Date of Appointment	MEMO.
1	Lingan	Miles. 0	.....	\$ cts. 50 00 or com'n.....	.....	N. B.—The commission is 25 p.c. upon all business to and from the office; said commission guaranteed not to be less than at the rate of \$50 per annum.
2	Low Point Lighthouse.....	5	S. Peters.....	50 00 do	Aug 1, 1891	
	Totals	5		100 00		

Estimated annual maintenance and repairs :—
Land lines—Salaries and repairs..... \$150 00 Required in Estimates, 1888-89.

EAST COAST SECTION.

N. B.—In connection with the Signal Service a land line 208 miles in length has been erected between Canso and Halifax for a bonus of \$16,000, and is now maintained and operated by the Western Union Telegraph Company without further cost to the Government.

MABOU—CHETICAMP, C. B., TELEGRAPH SYSTEM.

1	Mabou	0	Miss M. Finn.....	50 00 or com'n.....	April 1, 1887	N. B.—The commission is 25 p.c. of the Government line tariff receipts, and is guaranteed to amount to not less than \$50 per annum.
2	Broad Cove.....	20	J. J. Campbell.....	do	Sept. 1, 1887	
3	Margaree Harbor.....	17	Mrs. M. A. McLellan.....	do	April 1, 1887	
4	Cheticamp	16	Mrs. M. Fiset.....	do	do	
	Total	53				

Estimated cost of annual maintenance..... \$650 00 Required in Estimates, 1888-89.
Estimated revenue..... 150 00

CHATHAM-ESCEMINAC, N.B., TELEGRAPH SYSTEM.

No.	Stations.	Intermediate Distances.	Operators.	Salary per Annum.	Date of Appointment.	MEMO.
1	Chatham	Miles. 0	Great North-Western Telegraph Co.	\$ cts. 185 00	1885.	This amount is paid for supervision of the line and office accommodation at Chatham.
2	Black Brook	5½	.....	50 00 or com'n.	.....	The commission is 25 per cent. of the Government line tariff receipts, and is guaranteed to amount to not less than \$50 per annum. Black Brook office has been closed since Feb., 1887, in consequence of the agent having resigned.
3	Bay du Vin.	15	Miss M. Williston	50 00 do	March 1.....	
4	Esceminac	2½	Mrs. A. Lewis.....	50 00 do	Sept. 1	
5	Point Esceminac Lighthouse	12	H. W. Phillips, jun.....	50 00 do	Feb. 1.....	
	Total	42		385 00		

Estimated cost of annual maintenance, salaries and repairs..... \$800 00, Required in Estimates, 1888-89.

Estimated Revenue..... 150 00

GOVERNMENT TELEGRAPH SERVICE—Continued.

BAY OF FUNDY, N. B., TELEGRAPH SYSTEM.
GRAND MANAN SECTION.

No.	STATIONS.	Inter- mediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	MEMO.
	<i>Long Eddy Cable Hut, to</i>	Miles.		\$ cts.		
1	Flagg's Cove.....	3	{ Mrs. C. C. Seely (D. Supt.) Miss T. E. Milligan.....	420 00 50 00	Nov. 18, 1880... Aug. 1, 1887..	N. B.—The commission is 25 p. c. upon all business to and from the office; said commission guaranteed not to be less than at the rate of \$50 per annum.
2	Woodward's Cove.....	6	E. Cameron.....	50 00 or com'n..	April 1, 1885...	
3	Grand Harbour.....	2	F. A. Newton.....	50 00 do	April 1, 1887...	
4	Seal Cove.....	4½	O. McLaughlin.....	50 00 do	Jan. 1, 1883..	
5	Southern Head Lighthouse...	5½	Wood McLaughlin..... D. McKay, Repairer.....	50 00 do 60 00	do 18, 1881... May 1, 1881..	
	Totals	21	.....	730 00		

CAMPO BELLO SECTION.

	Liberty Cross Cable Hut, to	Miles.	G. M. Mabee J. Cushing.	\$ cts.	Dec. 1, 1881... do 26, 1881...
1	Welchpool	7 ⁷ / ₄	.....	100 00 or com'n....	
2	Eastport, Maine, U.S.A.....	4 ¹ / ₄	.....	100 00	
	Totals.....	8	.....	200 00	

ESTIMATED COST OF ANNUAL MAINTENANCE AND REVENUE.

Land lines—Salaries and repairs	\$1,600 00
Cable—Repairs, probably	1,000 00
Total	\$2,600 00
Less probable revenue.....	700 00
Balance deficit.....	\$1,900 00

\$2,600 00 Required in Estimates,
1888-89.

GOVERNMENT TELEGRAPH SERVICE—Continued.
CHICOUTIMI AND NORTH SHORE OF ST. LAWRENCE TELEGRAPH SYSTEM.
CHICOUTIMI SECTION.

STATIONS.	Inter-mediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	Memo.
	Miles.				
1 Bay St. Paul.....	0	F. Boivin.....	\$ 50 or comm'n* {	Previous to {	*The commission upon business is 25 per cent of the tolls for the Government line; the amount guaranteed to be not less than \$50 per annum
2 St. Urbain.....	9	A. Belvin.....	50 do ... {	April 1, '85. {	
3 La Cruche.....	37	A. Gauthier (Repairer).....	50 do ... {	do do {	
4 St. Alexis.....	31½	G. Lavoie.....	420 ... {	do do {	
5 St. Alphonse de Bagotville.....	3¾	A. Simard.....	50 or comm'n* {	May 15, 1887... {	
6 Chicoutimi.....	11½	T. Bolly.....	50 do ... {	April 1886... {	
Total.....	92		720	April 28, 1886..	

MAINTENANCE.
Included with North Shore Section.
NORTH SHORE SECTION.

1 Murray Bay.....	0	Mrs. F. Vincent.....	\$ 50 or comm'n* {	Previous to {
2 Cap L'aigle.....	4	N. Duchesne.....	50 do ... {	April 1, '86. {
3 St. Fidèle.....	6	E. W. Tremblay.....	50 do ... {	June 1, 1888... {
4 St. Siméon.....	11	D. Gaudin.....	50 do ... {	Previous to {
5 Baie des Rochers.....	12	G. Savard.....	50 do ... {	April 1, '85. {
6 Riv aux Canards } Loop Line	17	G. Foulletanne.....	50 do ... {	Dec. 1, 1887... {
7 St. Etienne.....	17	M. McLaren (Repairer).....	420 ... {	June, 1887... {
8 Tadoussac (½ mile cable).....	13	J. Savard.....	50 or comm'n* {	Nov, 1886... {
9 Bergeronnes.....	15	D. Lapointe.....	50 do ... {	Nov, 1886... {
10 Beccomains.....	12	M. Savard.....	50 do ... {	Previous to {
11 Mitte Vaches.....	16	J. H. Topping.....	50 do ... {	April, 1885. }
12 Portneuf Mills.....	11½	J. A. Fuzee.....	50 do ... {	do do {
		R. Pincombe.....	50 do ... {	do do {
			50 do ... {	May, 1887..... }

					50 or comm'n..	Previous to
13	Portneuf Light(Loop 3 miles)	9	L. Tremblay.....			April 1, '85.
14	Sault au Cochon.....	7	E. Courbron (Repairer)..		420.....	April 1, 1888.....
15	Betsiamits.....	31	J. Forrest.....		50 or comm'n'.....	Dec. 1, 1887.....
16	Pointe aux Ouardes (cable)	12	P. O. Dupuis.....		50 do.....	Nov. 1, 1887.....
17	Pointe Paradis, Manicouagan	18	P. O. Bonenfant.....		500 per annum.....	Aug. 1, 1883.....
18	River Godbout (cable)	26	N. A. Comeau.....		50 or comm'n'.....	Oct. 15, 1883.....
19	Pointe des Monts.....	18 1/2	L. F. Fafard.....		50 do.....	Dec. 28, 1883.....
20	Trinity Bay.....	7 1/2	Z. Poulin.....		50 do.....	May 16, 1884.....
21	Egg Island Harbour.....	18	P. S. Bodman (Repairer)		420.....	Oct. 1, 1886.....
22	Pentecost River.....	13	Dist Supt's Office.....		180.....	Jan. 2, 1884.....
23	River Moisie.....	100	P. E. Vignault.....		50 or comm'n'.....	May 1, 1885.....
24	Poste de Mingan.....	18	D. Porlier.....			
25	Pointe aux Esquimaux	18				
26	Natashquan.....	64				
27	Wapitaguam.....	60				
28	Shediac.....	83				
29	Bonne Espérance.....	49				
30	Anse aux Blanc Sablon	24				
31	Forteau Bay.....	12				
32	Point Amour Lighthouse.....	4 1/2				
33						
		820				

Total length of land line and cable Murray Bay to Moisie is 395 1/2 miles.

Projected Line.

ESTIMATED COST OF ANNUAL MAINTENANCE.

Chicoutimi and North Shore to Moisie.....	\$7,500 00
Cable repairs.....	500 00
Required in Estimates for 1888-89.....	\$8,000 00
Estimated Revenue.....	3,200 00

GOVERNMENT TELEGRAPH SERVICE—Continued.

GROSSE ISLE QUARANTINE TELEGRAPH SYSTEM.

STATIONS.	Intermediate Distances.	Operators.	Salaries per Annum.	When Appointed.	Memo.
1 Quebec.....	Miles. 0	Great North-Western Telegraph Co.	\$ cts. 185 00		
2 <i>L'Ange Gardien</i>	13				
2 St. Pierre ($\frac{1}{4}$ mile cable).....	4	C. Turcott.....	50 00 or com'n.....	Mar. 1, 1885	This amount is paid for supervision of the line, and covers rent of the pole line Quebec to L'Ange Gardien, for which \$35 per annum is charged.
3 St. Pétronille.....	4 $\frac{1}{2}$	Mrs. Blais.....	50 00 do	Oct. 1, 1887	
4 St. Laurent.....	6 $\frac{1}{2}$	Mile. L. Chabot.....	50 00 do	Dec. 20, 1884	
5 St. Jean.....	7	H. Bernard.....	50 00 do	Jan. 1, 1885	
6 St. François (including 6 $\frac{1}{2}$ miles cable).....	6 $\frac{1}{2}$	M. Emond.....	50 00 do	Mar. 1, 1885	
7 Grosse Isle quarantine office. do hospital.....	9 1 $\frac{1}{2}$	M. Leunglois..... (Telephone).....	50 00 do	Sept. 1, 1885	This commission is 25 per cent. of the Government line tariff, and is guaranteed to amount to not less than \$50 per annum.
Total.....	52		485 00		

ESTIMATED COST OF ANNUAL MAINTENANCE.

Land line salaries and repairs.....	\$ 850 00
Cable repairs.....	300 00
Required in Estimates, 1888-89.....	\$1,150 00
Estimated Revenue.....	\$ 200 00

GOVERNMENT TELEGRAPH SERVICE.—Continued.

ONTARIO: BATH-AMHERST ISLAND TELEGRAPH SYSTEM.

No.	STATIONS.	Inter- mediate Distances.	Agents.	Salaries per Annum.	Date of Appointment.	Memo.
1	Bath.	0	F. W. Armstrong,	\$50 00	Nov. 15, 1888	Accountant and General Agent.
2	Emerald, .. (1½ mile cable	3½	M. Fowler & McGinness, 25 p. c. comm'n....	do	do	The commission is upon the receipts for Govern- ment line.
3	Stella	4½	J. S. Neilson,	do	do	
	Total	8				

[1888]

This line is operated with telephones.

Estimated cost of actual maintenance..... \$250 00

The revenue will about cover the maintenance expenditure.

GOVERNMENT TELEGRAPH SERVICE—Continued.

LINES IN THE NORTH-WEST TERRITORY.
QU'APPELLE-EDMONTON SECTION.

STATIONS.	Intermediate Distances.	Operators.	Salaries per Annum.	Date of Appointment.	MEMO.
1 Qu'Appelle	Miles. 0	E. W. Warner.....	\$ 720 00	Jan., 1883...	
2 Fort Qu'Appelle	17	Miss A. Johnston	600 00	Mar. 1, 1885...	
3 Touchwood	46	A. Von Lindeburg	600 00	Nov. 1, 1883...	
4 Humbolt.	78	J. M. Anderson	720 00	Nov. 1, 1884...	
5 Clarke's Crossing	55	E. J. Molloy, Agent.....	720 00	do 1, 1884...	
6 Henrietta.	38	J. Harrington, Repairer	600 00	Jan. 1, 1888...	
7 Battleford	47	W. Saksbury, Repairer	720 00	Oct. 1, 1886...	
8 Fort Pitt.	89	H. Richardson, Agent	720 00	Prev. to 1882...	
9 Moose Hill Creek	62	H. McOleneghan, Operator.....	720 00	April 1, 1886...	
10 Victoria.....	76½	H. Sikes, Repairer.....	720 00	July 1, 1888...	
11 Fort Saskatchewan.....	49	W. M. McDonald, Repairer.....	720 00	June, 1887...	
12 Edmonton.....	24	N. Potvin, Repairer	720 00	Nov. 6, 1887...	
		W. C. Gillis, Repairer	720 00	Jan., 1887...	
		W. G. Ross, Agent.....	Com. 25 p c.	Dec., 1886...	
		A. Taylor, Agent.....	720 00	Prev. to 1882...	
		W. McKay, Repairer	720 00	May 1, 1886...	
<i>Branch Line—</i> Clarke's Crossing	0		720 00	Aug. 1, 1887...	
St. Laurent.....	60	L. P. O. Noel.....	720 00	Mar., 1887...	
Prince Albert.....	23	E. J. Rankin			
<i>Branch Line—</i> Clarke's Crossing	0				
Saskatoon	14				
<i>Branch Line—</i> Edmonton.....	0				
St. Albert	9				
Total	687½	See note d.			

NOTE. The new line from Battleford to Edmonton via Fort Pitt and Victoria was completed on 14th August, 1887, and on that date the old line via Strang and Leduc was abandoned

d. The Saskatoon and St. Albert branch lines are operated with telephones.

Estimated cost of annual maintenance—salaries, supplies and repairs including the Wood Mountain Section—required in Estimates, 1888-89, \$70,000.

GOVERNMENT TELEGRAPH SERVICE—Continued.

NORTH-WEST TELEGRAPH LINES.—WOOD MOUNTAIN AND FORT MACLEOD SECTIONS.

No.	STATIONS.	Intermediate Distances.	Operator,	Salaries, per Annum.	Date of Appointment.	MEMO.
		Miles.		\$ cts.		
	<i>Fort Macleod Line—</i>					
1	Galt Junction	0				
2	Lethbridge	107				
3	McLeod	28½				
4	Fort MacLeod	½				
	<i>Wood Mountain Line—</i>					
1	Mooss Jaw	0	H. Rutherford,	240 00		
2	Wood Mountain	90½	J. S. Macdonald,	720 00		
	Total	226½		960 00		
						The Fort Macleod line has been leased to the North-West Coal and Navigation Co. at 5 per cent. per annum upon cost of construction.
						The Wood Mountain line is operated directly, as part of the Government Telegraph Service.

GOVERNMENT TELEGRAPH SERVICE IN BRITISH COLUMBIA.

Office	Intermediate Distances.	Names.	Positions.	Salaries per month.	Date of Appointment.	Memo.
	Miles.					
Ashcroft Station.....	0					This line is now operated by the Canadian Pacific Railway Co. for the Government. The arrangement being terminable at any time.
Cache Creek.....	4					
Clinton.....	26					
Bridge Creek.....	53					
Soda Creek.....	78					
Quesnelle.....	54½					
Stanley.....	48					
Barkerville.....	13					This line was leased for 99 years to Messrs. J. A. Laidlaw and J. Wilson, on the 30th October, 1887.
<i>Branch.</i>	276½					
New Westminster..... Ladner's Landing (3 mile cable).....	18					
Total	294½					

Estimated cost of maintenance, including general repair of line, \$6,500, required in Estimates, 1888-89.

APPENDIX No. 14.

TABULAR STATEMENTS

SHOWING THE DATES OF THE

OPENING AND CLOSING OF NAVIGATION

AT THE

PRINCIPAL PORTS OF CANADA,

ON THE SEABOARD AND ON THE GULF, RIVER, AND LAKES OF THE
ST. LAWRENCE ;

ALSO, PORTS WHICH ARE ALWAYS OPEN.

APPENDIX No. 14.

No. 1.—STATEMENT of the Closing of Navigation in the Fall of 1887, and of the opening in the Spring of 1888.

Name of Port.	Location.	Closed in in 1887.	Opened in 1888.	Remarks.
Charlottetown, P.E.I.....	Gulf St. Lawrence.....	Dec. 27...	April 21...	Spring tides, 9½ ft.; neap tides, 8 ft. Depth of water at low water, at Rail-way Wharf, 20 ft.; at Queen's Wharf, 14 ft.
Georgetown	do	Jan. 23, '88...	do 30...	Spring tides rise 5½ ft.; neap, 4 ft.
Pictou,	do	Dec. 26...	do 16...	Ferry steamer "Mayflower" continued running until 14th Feb., 1887, and resumed her trips on 23rd March, 1887. Neap tides rise about 4½ ft.; spring, 6 to 7 ft.
Sydney	do	Jan. 10, '88...	do 26...	Spring tides rise 4 ft.; neaps, 2½ ft.
Shediac,	do	Dec. 23	May 8	Spring tides rise 10 ft.; neaps, 6 ft.
Campbellton	Baie des Chaleurs	do 1...	do 8...	Spring tides rise 7 ft.; neaps, 4 ft.
Bathurst	do	Nov. 26...	do 8...	Spring tides rise about 5 ft.
Percé	Gulf St. Lawrence	do 23...	April 22...	Rise and fall of tide, about 6 ft.
Gaspé Basin	do	Dec. 25...	May 15...	Spring tides rise 23 ft.
Tadoussac	River St. Lawrence	Nov. 24...	April 10...	Rise and fall of tide, from 13 to 18 ft.
Quebec	do	do 23...	do 29...	
Le Sorel	River Richelieu	do 30...	May 1...	
St. John's	do	do 29...	April 19...	
Montréal	River St. Lawrence	Dec. 23...	do 29...	
Kingston,	Lake Ontario	do 30...	do 12...	
Belleville	do	Nov. 30...	do 23...	
Port Hope	do	Dec. 12...	do 13...	
Toronto	do	do 9	do 7...	
Port Stanley	Lake Erie	do 23	March 31...	
Port Dover	do	do 15...	April 7...	
Windsor	Detroit River	do 16...	do 3...	The dates given are those of the last departure for and first arrival from ports at a distance. Virtually this harbour is never closed, as the ferry boats run constantly between this place and Detroit.
Sarnia	Lake Huron	do 4...	do 9...	
Goderich	do	Nov. 23...	do 28...	
Kincardine	do	do 15...	May 2...	
Owen Sound	Georgian Bay	Dec. 8...	do 4...	
Collingwood	do	do 2...	April 30...	
Warton	do	Jan. 20, '88...	May 1...	
Sault Ste. Marie	Lake Superior	Dec. 1...	do 8...	
Port Arthur	do	do 22...	do 21...	
Winnipeg,	Red River	Nov. 1...	April 28...	

Ref. No. 92,650.

No. 2.—STATEMENT showing some of the ports in the Dominion which are open to Navigation the whole year.

Name of Port.	County.	Province.	Depth of Water at Low Water.	Remarks.
Annapolis	Annapolis	Nova Scotia.....	15 to 20	In very severe winters thin ice forms, but screw steamers could always enter.
Barrington	Shelburne	do	12 to 20	At anchorage. Wharves dry at low water.
Digby	Digby	do	18	About ten feet at end of steamboat pier.
Halifax	Halifax	do	20 to 30	At wharves. 70 to 100 feet in harbour.
Liverpool	Queen's	do	7	On bar. At Brooklyn 24 feet.
Lockport	Shelburne	do	8	
Lunenburg	Lunenburg	do	12	
Parrsboro'	Cumberland	do .....	.....	Dry in harbour at low water.
Shelburne	Shelburne	do	40 to 60	
Yarmouth	Yarmouth	do	13	
St. Andrews	Charlotte	New Brunswick.	14	In inner harbour.
St. John	St. John	do	20	At entrance of harbour. 60 feet in harbour.
St. Stephens	Charlotte	do	6	30 feet at the ledge, 4 miles] below the town.
*Tadoussac	Saguenay	Quebec	30 to 50	
Windsor	Essex	Ontario .....	.....	Ferry boats cross Detroit River all winter.

*See remarks respecting Tadoussac Harbour in Appendix No. 8, of general report 1867-1882.

Victoria, Nanaimo, Burrard Inlet and all other ports in British Columbia, up to Skeena River, are always open. New Westminster is liable to be closed 7 to 15 days. See telegram No. 34,027, from the Hon. J. W. Trutch, 3rd May, 1883.

Tides in British Columbia.—At Victoria ordinary springs rise from 7 to 10 feet, neaps 5 to 8 feet; at Nanaimo ordinary springs rise 14 feet, neaps 11 feet; at New Westminster ordinary springs rise 7 feet, neaps 4 feet; at Hastings, Burrard Inlet, ordinary springs rise 16 feet, neaps 12 feet; at Port Moody, ordinary springs rise 10 to 12 feet, neaps 5 to 6 feet. See telegram from Hon. J. W. Trutch, 25th October, 1883, No. 39,810.

APPENDIX No. 15.

STATEMENTS.

1ST.—CONTRACTS LET BY THE DEPARTMENT.

2ND.—PROPERTY PURCHASED BY THE DEPARTMENT.

3RD.—PROPERTY LEASED BY OR TO THE DEPARTMENT.

DURING THE FISCAL YEAR ENDED 30TH JUNE, 1888.

APPENDIX No. 15.

Ref. No. 93,179.

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, 24th November, 1888.

SIR,—I have the honour to enclose the following statements which are required for insertion in the Annual Report for 1887-88, viz.:—

No. 1.—Statement of Contracts let by this Department during the fiscal year ended 30th June last.

No. 2.—Statement of Property purchased and sold by this Department during the same period.

No. 3.—Statement of Property leased to and by this Department during the same period.

I have the honour to be, Sir,

Your obedient servant,

F. X. R. SAUCIER.

A. GOBEIL, Esq., Secretary,
Department of Public Works.

No. 1.—CONTRACTS let by the Department of Public Works of Canada, from the 30th June, 1887, to the 30th June, 1888.

Works.	Names of Contractors.	Date of Contract.	Amount.
			\$ cts.
PUBLIC BUILDINGS.			
<i>Government House, Parliament and Departmental Buildings.</i>			
Parliament Building—Speaker's Chair.....	Morel & Gagnon.....	Sept. 29, 1887	250 00
do do Re-covering some roofs.....	Douglas Bros.....	Nov. 10, 1887	4,328 00
do do Covering & ventilators.....	do.....	June 15, 1888	800 00
Parliament and Departmental Buildings—Supply of coal.....	G. W. McCullough.....	July 4, 1887	7,279 25
Parliament and Departmental Buildings—Covering steps for winter.....	W. T. Odell.....	Nov. 12, 1887	210 00
Parliament and Departmental Buildings—Removal of snow.....	P. McKenna.....	do 25, 1887	610 00
Parliament and Departmental Buildings and Rideau Hall—Supply of ice.....	D. N. Charlebois.....	Feb. 27, 1888	217 04
Rideau Hall—Removal of snow.....	A. Hunter.....	Nov. 21, 1887	695 00

No. 1—CONTRACTS let by the Department of Public Works, &c.—Continued.

Works.	Names of Contractors.	Date of Contract.	Amount.
PUBLIC BUILDINGS—Continued.			\$ cts.
<i>Nova Scotia.</i>			
Amherst Public Building—Asphalt pavement and wooden fence.....	Rhodes, Curry & Co...	Oct. 7, 1887	410 00
do do Supply of coal.....	Acadia Coal Company	Aug. 8, 1887	260 06
Antigonish do do	J. Kenna	do 8, 1887	67 50
Arichat do do	Capt. J. Leblanc.....	July 25, 1887	90 00
Baddeck, C.B. do do	J. McDonald.....	Sept. 7, 1887	87 50
Halifax Public Buildings do	Acadia Coal Company	Aug. 8, 1887	821 50
New Glasgow Public Building—Supply of water.....	Corporation of the Town of New Glasgow	Dec. 9, 1887	p.an. 100 00
do do Supply of coal.....	Acadia Coal Company	Aug. 8, 1887	171 24
Pictou Marine Hospital—Heating apparatus.....	Muirhead & Co	Oct. 11, 1887	639 00
do do Supply of coal	Acadia Coal Company	Aug. 8, 1887	48 73
do Custom House—Heating apparatus	C. B. Thompson	Oct. 18, 1887	1,325 00
do Public Building—Supply of coal	J. Read	July 19, 1887	115 35
Truro Public Building—Supply of coal.....	Acadia Coal Company	Aug. 8, 1887	125 00
Windsor do do	do do	do 8, 1887	220 52
Yarmouth do do	do do	do 8, 1887	200 00
<i>Prince Edward Island.</i>			
Charlottetown Public Building—Supply of coal.....	C. Lyons	Aug. 29, 1887	391 60
Montague do do	Capt. J. McEvoy.....	do 23, 1887	68 13
Summerside do do	J. Read.....	July 19, 1887	276 77
<i>New Brunswick.</i>			
Bathurst Public Building—Supply of coal	T. F. Gillespie.....	July 23, 1887	341 33
Carleton (St. John) Post Office—Supply of electric light	The Carleton Electric Light Company.....	June 1, 1888	p.an. 150 00
Chatham Public Building—Supply of coal	T. F. Gillespie.....	July 23, 1887	123 29
Fredericton do do	W. L. Busby	do 30, 1887	340 51
Moncton do do	Acadia Coal Company.	Aug. 8, 1887	221 85
Newcastle do do	T. F. Gillespie.....	July 23, 1887	361 22
Portland do do	R. P. & W. F. Starr...	do 30, 1887	26 98
St. John Post Office and Savings Bank and Marine Hospital—Supply of coal.....	do do	do 30, 1887	703 39
St. John Post Office and Custom House—Supply of coal.....	W. L. Busby	do 30, 1887	130 19
St. Stephen Public Building—Supply of coal.....	O. D. Hill & Co	Sep. 10, 1887	154 60
Sussex do do	R. P. & W. F. Starr...	July 30, 1887	180 18
Woodstock do do	do do	do 30, 1887	174 99
<i>Quebec.</i>			
Aylmer—Erection of Post Office.....	D. B. McDonald.....	May 28, 1888	6,830 00
Coaticook do	T. T. Shurtleff.....	Jan. 23, 1888	19,000 00
Hull Public Building—Supply of coal.....	McRae & Co.....	July 22, 1887	362 41
Joliette—Erection of Post Office.....	G. Beaucage.....	Apr. 20, 1888	11,500 00
Montreal Drill Hall—Furnishing armories.....	J. B. St. Louis & Bro...	Feb. 22, 1888	10,870 35
do Custom House—Recovering roof with copper.....	Garth & Co.....	Aug. 16, 1887	4,546 35
Montreal Public Buildings—Supply of coal.....	J. O'Brien & Co. and F. Robertson.....	Aug. 1, 1887	1,667 17
Quebec do do	G. M. Webster & Co...	July 26, 1887	1,368 94
Sherbrooke do do	Lucke & Mitchell.....	do 27, 1887	233 73
Sorel do do	H. C. Charland & Co.	do 30, 1887	249 25
do do Clock for tower.....	E. Chanteloup	Nov. 2, 1887	2,000 00
do do Completion of clock tower.....	G. Beaucage.....	Feb. 27, 1888	385 00

No. 1.—CONTRACTS let by the Department of Public Works, &c.—Continued.

Works.	Names of Contractors.	Date of Contract.	Amounts.
PUBLIC BUILDINGS.—Continued.			\$ cts.
<i>Quebec—Concluded.</i>			
St. Jérôme—Erection of Post Office.....	J. Fitzpatrick.....	Jan. 27, 1888	11,650 00
St. Johns Public Building—Supply of coal.....	Simard & Godin.....	July 30, 1887	160 00
St. Vincent de Paul Penitentiary—Heating pipes, and fittings, Catholic Chapel, keeper's hall and three dormitories.....	Garth & Co.....	Sep. 1, 1887	4,929 30
Three Rivers Custom House—Heating apparatus.....	Drapeau, Savignac & Co.....	Oct. 10, 1887	2,234 00
do Public Buildings—Supply of coal.....	Z. Marchand.....	Aug. 1, 1887	313 61
<i>Ontario.</i>			
Amherstburg Public Building—Supply of coal.....	J. G. Mullen.....	Sep. 14, 1887	192 19
Barrie do Complete stone fence.....	J. Armstrong.....	Nov. 8, 1887	1,924 60
do do Supply of coal.....	J. S. Johnston.....	Aug. 23, 1887	258 00
Belleville do do.....	Downey & Preston.....	July 28, 1887	385 00
do do Supply of electric light.....	Belleville Gas Co. ...	Apr. 24, 1888	p. an. 93 90
Berlin Public Building—Supply of coal.....	J. Fennell.....	Aug. 4, 1887	93 20
Brantford do do.....	Jno. Mann & Sons.....	July 29, 1887	263 18
Brockville do do.....	Canada Central Coal Co.....	do 29, 1887	201 25
Cayuga—Erection of Post Office.....	T. & R. Draper.....	Nov 23, 1887	7,874 00
Chatham Public Building—Supply of coal.....	H. A. Patteson & Co... ..	July 26, 1887	70 00
Clifton Public Building—Supply of coal.....	G. H. Howard & Co....	July 28, 1887	250 00
Cobourg do Alterations.....	W. Battell.....	Dec 17, 1887	1,246 00
do do Supply of coal.....	Hargraft & Co.....	Aug. 18, 1887	220 00
Cornwall do do.....	Grant & Courroy.....	July 30, 1887	172 50
Galt do do.....	J. Malcolm.....	do 30, 1887	173 65
Gananoque—Erection of Post Office.....	G. Wilson.....	Dec. 5, 1887	9,500 00
do Custom House—Supply of coal.....	The Rathbun Co.....	July 28, 1887	125 00
Hamilton Drill Hall—Alterations.....	M. A. Pigott.....	Oct. 29, 1887	3,701 75
do Public Building—New furnaces and connections for the heating apparatus.....	A. Clark.....	do 4, 1887	1,750 00
do Public Building—Supply of coal.....	A. E. D. Mackay's Sons	July 28, 1887	1,247 27
do do Water supply for building and for running elevator ...	Waterworks Committee, Hamilton.....	Apr. 27, 1888	p. an. 1,000 00
London Public Building—Supply of coal.....	J. P. O'Byrne.....	Aug. 1, 1887	839 95
Kingston Custom House and Post Office—Supply of coal.....	W. B. & S. Anglin....	do 2, 1887	1,135 67
Kingston Penitentiary—1 generator, 1 super-heater, 1 purifier, for gas works.....	Davidson, Doran & Co.	Jan. 11, 1888	1,012 00
London Custom House—Completing steam heating.....	W. J. Burroughes.....	Sep. 17, 1887	2,716 66
do Infantry School—Heating apparatus.....	McGuire & Bird.....	do 17, 1887	8,999 00
Napanee Public Building.....	G. Newlands.....	Jan 25, 1888	25,350 00
Ottawa Experimental Farm—Residence for Supt.....	F. Toms.....	July 5, 1887	9 800 00
do do Barn and stabling ..	Wm Stuart.....	Aug. 22, 1887	17,200 00
do do 4 residences for staff..	Tobin & O'Keefe.....	Oct. 18, 1887	18,844 00
do do Heating apparatus for 5 residences ..	J. G. Johnson & Co....	Mar. 28, 1888	3,470 00
do do Excavating cellars and building masonry... ..	Tobin & O'Keefe.....	May 8, 1888	1,800 00
do do Museum and Offices....	Wm. Stuart.....	June 7, 1888	11,445 00
do Printing Bureau—Shed for the use of.....	L. Gratton.....	Apr. 6, 1888	550 00
do Victoria Hall—Galvanized iron-work.....	J. R. Esmonde.....	Feb. 11, 1888	222 75
do do Carpenter's work.....	W. Palen.....	Jan. 24, 1888	795 00
Orangeville Public Building—Supply of coal.....	J. Morrison.....	Aug. 15, 1887	161 25
Peterborough Post Office—Fittings.....	J. E. Askwith.....	July 27, 1887	2,500 00
do Public Building—Supply of coal.....	Peterborough Gas Co.	do 28, 1887	221 09

No. 1.—CONTRACTS let by the Department of Public Works, &c.—Continued.

Works.	Names of Contractors.	Date of Contract.	Amount.
			\$ cts.
PUBLIC BUILDINGS—Concluded.			
<i>Ontario—Concluded.</i>			
Peterborough Public Building—Heating apparatus..	McAndrew & Noble.....	Oct. 7, 1887	1,210 75
Pembroke—Retaining wall on site for Public Building	Munro & Beatty.....	Nov. 4, 1887	2,400 00
Port Hope Public Building—Supply of coal.....	J. A. Brown & Co.....	Aug. 3, 1887	142 50
St. Catharines Post Office do	E. Gadsby and H. O'Loughlin.....	do 6, 1887	151 68
St. Thomas Public Building do	J. Ellison.....	do 11, 1887	353 35
Stratford do do	Myles & Son.....	do 11, 1887	1,353 35
Toronto Public Buildings do	Whiteside & Bell.....	July 28, 1887	620 00
Trenton Public Building—Construction	W. Alford	Dec. 2, 1887	22,950 00
do do Clock and bell tower and drain	do	Apr. 20, 1888	4,325 00
Windsor Public Building—Supply of coal.....	J. & T. Hurley.....	July 29, 1887	364 00
<i>North-West Territories.</i>			
Battleford—Guard room for N. W. M. Police.....	J. N. Pomerlean	Oct. 24, 1887	2,899 80
Calgary—Barrack building and hospital.	Kennedy & Heney.....	Dec. 21, 1887	20,528 00
do Stone foundation under police barracks..	do	Apr. 30, 1888	4,800 00
Regina jail—Additional works.....	D. McDougall.....	Aug. 15, 1887	1,400 00
<i>British Columbia.</i>			
New Westminster Penitentiary—Residence for unmarried men.....	Ackerman Bros.....	Mar. 27, 1888	4,993 00
HARBOURS AND RIVERS—DREDGING AND DREDGE VESSELS.			
<i>Nova Scotia.</i>			
Bayfield—Repairing wharf.....	S. O'Donoghue.....	Nov. 1, 1887	7,500 00
Digby—Removal of detached sunken block.....	Brown & Oliver.....	Apr. 4, 1888	1,600 00
Sheet Harbour—West River—ballast wharf.....	J. McMillan.....	Dec. 15, 1887	1,497 00
<i>New Brunswick.</i>			
Anderson's Hollow—Rocher Bay—Extension of break-water	Anderson & Barbour..	Dec. 6, 1887	2,856 00
Bay Verte—Ballast wharf.....	Prescott & Gray	Nov. 28, 1887	4,300 00
Belliveau—Wharf.....	J. McFarlane.....	Mar. 1, 1888	1,737 00
Cape Tormentine—Wharf.....	E. Murphy.....	Apr. 28, 1888	Schd. rates.
St. John Harbour—Repairing and re-constructing portion of face wall—Fort Dufferin Glacis.....	G. S. Mayes	Nov. 24, 1887	2,834 00
St. John Harbour—Re-constructing outer portion of eastern wharf at Partridge Island	Wallace & Thompson..	do 24, 1887	2,146 00
<i>Quebec.</i>			
*Cap de la Magdeleine—Pier.....	Municipality of Cap de la Magdeleine	Aug 29, 1887	3,000 00
Portage du Fort Bridge—Painting.....	Grant and Coyne.....	Sept 24, 1887	Schedule.
Ste. Adelaide de Pabos—Pier.....	T. LeMoire.....	June 22, 1888	11,500 00
Three Rivers—Ice pier	T. E. Normand.....	Nov. 10, 1887	1,300 00

No. 1.—CONTRACTS let by the Department of Public Works, &c.—*Concluded.*

Works.	Names of Contractors.	Date of Contract.	Amount.
HARBOURS AND RIVERS—DREDGING AND DREDGE VESSELS.			\$ cts.
<i>Ontario.</i>			
Cobourg—Rebuilding of portion of western pier.....	J. W. Dinwoodie.....	Mar. 24, 1888	7,200 00
Collingwood—Construction of crib work to close gap between old slab wharf and outer breakwater...	Fleming, Lindsay & Burdette.....	Feb. 17, 1888	6,995 00
Goderich—Sluice.....	D. Porter.....	Nov. 7, 1887	10,500 00
Midland Harbour—Dredging.....	P. Navin.....	Mar. 31, 1887	Schedule.
Tolsma Bay—Pier on the west side.....	Porter & Reed.....	Sept. 30, 1887	7,000 00
<i>North-West Territories.</i>			
Battleford—Highway bridge across Battle River.....	Kennedy & Heney.....	May 2, 1888	24,500 00
<i>Dredge Vessels.</i>			
Boiler for dredge "Geo. McKenzie".....	Geo. Fleming & Son...	July 18, 1887	750 00
Victoria, B. C.—Construction of a tug boat.....	Albion Iron Works Co.	Dec. 1, 1887	12,700 00
TELEGRAPH LINES.			
N.-W. Territories—Erecting telegraph poles between Qu' Appelle and Humboldt.....	J. Carson.....	July 29, 1887	457 76
N.-W. Territories—Supply of poles for line from Clark's Crossing to Prince Albert.....	Baptiste Boyer.....	Apr. 30, 1888	1.25 per pole
Ontario—To construct and equip line between Colpoys's Bay and Tobermory.....	G. N. W. Tel. Co.....	Oct. 11, 1887	5,600 00

*\$3,000 were contributed by the Government and \$2,000 by the Municipality. Works carried out from plans approved by the Department.

F. X. R. SAUCIER.

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, 24th November, 1888.

No. 2.—STATEMENT of Property purchased or sold by the Department of Public Works during the Fiscal Year ended 30th June, 1888.

Date of Conveyance.	Vendors.	Purchaser.	Description of Property.	For what Purpose.	Area.	Price.
						\$ cts.
July 23, 1887.	Corporation of the Village of Gananoque.....	Her Majesty	Parts of lots 13 and 14, Block O, in the Village of Gananoque, Ont.....	Site for Post Office.....	3,600 super. ft.....	1 00
Aug. 19, 1887.	S. Jonasson & F. Frederickson.....	do	Tug Boat "Victoria".....	Dredging.....	.....	3,400 00
July 20, 1887.	Hon. Frs. Clemenow.....	do	Lot No. 13, with building thereon, corner of Queen and O'Connor Streets, Ottawa, "Victoria Hall".....	Fishery Exhibit.....	.....	10,000 00
Sept. 13, 1887.	Her Majesty	T. D. Adams	Old Custom House Building, Newcastle, N.B.	No longer required by Dept	.....	1,200 00
Oct. 1, 1886.	do	J. B. Bougite,	Certain telegraph lines in British Columbia.....	.....	.....	15,780 00
July 1, 1837.	do	jun.....	.....	.....	.....	.....
Oct. 20, 1887.	The Incorporated Synod of the Diocese of Toronto	Her Majesty	Parts of cadastral Nos 538 and 56', Parish of St. Louis de Gonzague, Quebec.....	No longer required by Dept	3 roads, 28 perch	4,000 00
Dec. 7, 1887.	J. Thompson.....	do	Lot on Kent Street, Lindsay, Ontario.....	Site for Post Office.....	66 X 196 ft. and lane.....	4 000 00
do 12, 1887.	J. Sadler.....	do	Cadastral lot No. 759, Main Street, Aylmer.....	do do.....	11,160 super. ft..	500 00
Jan. 17, 1888.	R. McCarthy.....	do	Part of lot No. 43, Dalhousie, N.B.....	do do.....	7,840 do	500 00
Dec. 9, 1887.	A. Murray.....	do	Parts of lots Nos. 7 and 8, Block 2, Prescott, Ontario.....	do do.....	.....	3,500 00
Feb. 16, 1888.	Mrs. W. E. McPhadden	do	West half of lot No. 1 and part of lot No. 12, at Cayuga, Ontario.....	do do.....	4,000 super. ft..	250 00
do 24, 1888.	A. McIntyre.....	do	Part of east half of lot No. 3, Township of Hawkesbury, County of Prescott, Ontario	Access to slide and booms	.....	100 00
Jan. 21, 1888.	J. Livingston <i>et ux</i>	do	Lots 46, 47 and 48, Maple St. Winnipeg, Man.	at Carillon.....	15,160 do	5,000 00
do 21, 1888.	D. Livingston <i>et ux</i>	do	Parcel of land at Big Bras D'Or, N.S.....	Site for Immigrant Building	.....	1 00
Mar. 11, 1887.	J. B. North <i>et ux</i>	do	Strip do do	} Right of way to and	2,500 super. ft....	1 00
Oct. 26, 1887.	U. Leblanc.....	do	Half acre of land including Curry's wharf in Horton's Landing, N.S.....	site for wharf.....	1,100 do	200 00
Feb. 3, 1888.	Mrs. S. E. Anderson.....	do	Two-thirds of south-west part of cadastral lot No. 304, N. Dame St. Joliette, Quebec.....	Approach to wharf.....	.....	3,500 00
April 12, 1888.	T. N. Dancy <i>et ux</i>	do	Release of the <i>rente constituée seigneuriale</i> on next above.....	do do.....	.....	26 75
		do	Lot No. 5, south side of West Street Golderich, Ontario.....	do do.....	.....	1,600 00

DEPARTMENT OF PUBLIC WORKS, OTTAWA, 24th November, 1888. F. X. R. SAUCIER.

No. 3.—STATEMENT of Property and Rights leased to and by the Department of Public Works during the Fiscal Year ended 30th June, 1888.

Date of Lease.	Lessor.	Lessee.	Property Leased.	For what purpose used.	Duration of Lease.	Rent payable.
1887.						\$ cts.
Aug. 10...	Her Majesty	Corporation of the City of New Westminster.	Lands near the Penitentiary Reserve—New Westminster, B. C.	Right of way for C. P. R.	99 years.....	50 00 p. an'm
do 24...	do	School Trustees, Hamilton, Ont.	Old Custom House.....	School purposes.....	1 year.....	100 00 do
Oct. 13...	do	Municipal Council of the City of Hamilton.	Old Post Office.....	Municipal offices.....	2 years and 7 months.	1,000 00 do
do 23...	do	J. A. Laidlaw & J. Wilson.	Telegraph line between New Westminster and Ladner's Landing, B. C.	.....	99 years.....	1 00 do
1888.						
Jan. 9...	A. D. Richard.....	Her Majesty.....	Uppermost flat of building, Nos. 537 and 539, Sussex St., Ottawa.	Geological Museum.....	1 year.....	200 00 do
Feb. 29...	Proprietor Victoria Chambers.	do	One room in Victoria Chambers, Ottawa.	Department of the Interior.	.....	13 00 do
Jan. 5...	L. Gratton.....	do	Ground floor of building corner McKenzie Avenue and St. Patrick St., Ottawa.	Government Printing Bureau.	As long as required.	30 00 p. mo.

F. X. R. SAUCIER,

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, 24th November, 1888.

APPENDIX No. 16.

LIST OF SOME OF THE ACTS OF PARLIAMENT

PASSED AT THE SESSION OF 1888

AND HAVING REFERENCE TO

THE DEPARTMENT OF PUBLIC WORKS.

OR WORKS UNDER ITS CHARGE.

APPENDIX No. 16.

Ref. No. 93,112.

LIST of some of the Public Acts of the Parliament of Canada, passed at the Second Session of the Sixth Parliament of Canada, ended on the twenty-second day of May, 1888, and having reference to the Public Works Department, or works under its charge.

Subject.	Full Title of the Statute.	Chapter.	Page in Statute Book.
Sums granted to Her Majesty for the financial year ending 30th June, 1889, and the purposes for which they are granted.	An Act for granting to Her Majesty certain sums of money required for defraying certain expenses of the public service for the financial years ending respectively the 30th June, 1888, and the 30th June, 1889, and for other purposes relating to the public service.	1	3
Concerning the debt of the Corporation of the Harbour Commissioners of Montreal to the Government of Canada.	An Act to make further provision respecting the construction of the ship channel between Montreal and Quebec.	5	53
The graving dock at Lévis, Que. to become a public work of Canada, &c.	An Act relating to certain advances made to the Quebec Harbour Commissioners.	6	55
As to yearly return of accounts of the appropriation of the several supply grants.	An Act to amend "The Consolidated Revenue and Audit Act," chapter twenty-nine of the Revised Statutes of Canada.	7	57
Public Officers.....	An Act to amend "The Civil Service Act," chapter seventeen of the Revised Statutes of Canada.	12	71
Printing and Stationery.....	An Act to amend chapter twenty-seven of the Revised Statutes, respecting the Department of Public Printing and Stationery.	17	105
Preservation of Submarine Telegraph Cables.	An Act respecting the International Convention for the Preservation of Submarine Telegraph Cables.	31	233
Yearly return to be sent to the Minister of Public Works, Vol. II (Section 16).	An Act relating to the Upper Ottawa Improvement Company.	102	273

N.B.—In the Vol. of the Statutes of Canada, 1888, will be found the following :—

Page clxxiv—By-law as to the Quebec Graving Dock.

Page clxxvii—Rules and Regulations for the management and working of the Graving Dock at Esquimaux, B.C.

F. X. R. SAUCIER.

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, 22nd November, 1888.

APPENDIX No. 17.

NATIONAL ART GALLERY.

CURATOR'S REPORT.

APPENDIX No. 17.

NATIONAL ART GALLERY.—CURATOR'S REPORT.

Ref. No. 92,613.

NATIONAL ART GALLERY,

OTTAWA, 3rd November, 1888.

SIR,—I have the honour to report the following additions to the Gallery received during the fiscal year ended 30th June, 1888:—

Oil painting by R. Harris, R. C. A. "Fathers of Confederation."

Oil paintings, six in number, by Paul Kane.

Oil paintings, two in number, by Mons. Plomondin.

The above pictures were removed from the House of Commons to the Gallery, the latter being considered more suitable with regard to light, &c.

The number of visitors to the Gallery has steadily advanced from year to year since its inauguration in 1882. During the fiscal year 16,593 visitors registered their names, an increase of 4,650 over the attendance of preceding year. Public interest has also been manifested by the many donations of works of Art; for with few exceptions the collection is a free gift to the Government.

Early in the year the Gallery was removed from the Supreme Court building to the present Gallery on O'Connor street. Considerable alterations were found necessary to render the rooms suitable; they are now well lighted and convenient, with space to spare for additional works of Art. In order to maintain interest in the Gallery it is of the utmost importance that additions be made each year, and that such additions be of a high class of Art, works worthy of a National Collection.

I have the honour to be, Sir,

Your obedient servant,

JOHN W. H. WATTS,

Curator.

A. GOBEL, Esq.,

Secretary, Department of Public Works,
Ottawa.

APPENDIX No. 18.

OFFICERS OF THE DEPARTMENT.

APPENDIX

Members, Commissioners and Assistant Commissioners of the Board of Work,
Architects of the Department of

Chairman, Commissioners and Ministers.			Assistant Commissioners and Deputy Ministers.	
Names.	From	To	Names.	Date of Appointment.
<i>Under Statute 4-5 Vic., Cap. 38, Corporation of Board of Works.</i>				
Hon. H. H. Killaly, Chairman.....	.....	.....		.....
D. Daly	Dec. 29, 1841	Oct. 3, 1844	}	Members..
S. B. Harrison....				
J. Davidson				
<i>New Board of Works.</i>				
Hon. H. H. Killaly, Chairman.....	Oct. 5, 1844	June 8, 1846	}	Members..
D. Daly				
W. H. Draper....				
W. Morris.....				
D. B. Papineau)				
<i>Under Statute 9 Vic., Cap. 37, etc.</i>				
Hon. W. B. Robinson, Chief Commissioner..	July 4, 1846	Mar. 10, 1848	Hon. Chas. Eus. Casgrain, Assist. Commissioner	Aug. 1, 1846
E. P. Taché do ...	Mar. 11, 1848	Nov. 26, 1849	Hon. M. Cameron, Asst. Commissioner	Mar. 11, 1848
J. Chabot do ...	Dec. 15, 1849	Mar. 31, 1850	Jno Westenhall, Asst. Commissioner	Feb. 2, 1850
W. H. Merritt do ...	April 20, 1850	Feb. 11, 1851	Hon. Jos. Bourret, Asst. Commissioner	April 20, 1850
J. Bourret do ...	Feb. 15, 1851	Oct. 27, 1851	Hon. H. H. Killaly, Asst. Commissioner	Feb. 15, 1851
John Young do ...	Oct. 28, 1851	Sept. 22, 1852	.....	.....
J. Chabot do ...	Sept. 23, 1852	Jan. 26, 1855	.....	.....
F. Lemieux do ...	Jan. 27, 1855	Nov. 25, 1857	.....	.....
C. Alley do ...	Nov. 28, 1857	Aug. 1, 1858	.....	.....
L. H. Holton do ...	Aug. 2, 1858	do 6, 1858	.....	.....
L. V. Sicotte do ...	do 6, 1858	Jan. 10, 1859	Samuel Keefer, Asst. Commissioner	May 6, 1859
John Rose do ...	Jan. 15, 1859	June 12, 1861	.....	.....
Jos. Cauchon, Commissioner.	June 15, 1861	May 23, 1862	.....	.....
U. J. Tessier do ...	May 24, 1862	do 27, 1863	.....	.....
L. T. Drummond do ...	do 28, 1863	July 23, 1863	.....	.....
M. Laframboise do ...	July 23, 1863	Mar. 29, 1864	Toussaint Trudeau, Asst. Commissioner	Mar 15, 1864
J. C. Chapais do ...	Mar. 30, 1864	June 30, 1867	.....	.....
<i>Under Statute 31 Vic., Cap. 12.</i>				
Hon. Wm. McDougall, Minister....	July 1, 1867	Oct. —, 1869	Toussaint Trudeau, Deputy Minister....	May —, 1868
Hon. H. L. Langevin, C.B. do	Dec. 8, 1869	Nov, 5, 1873	.....	.....
Hon. Alexander Mackenzie do	Nov. 7, 1873	Oct. 16, 1878	.....	.....
Sir Chas. Tupper, C.B., K.C.M.G., Minister.....	Oct. 17, 1878	May 20, 1879	.....	.....
Sir Hector L. Langevin, C.B., K.C.M.G., Minister.....	May 20, 1879	.....	G. F. Baillairgé, Deputy Minister ...	Oct. 4, 1879

No. 18.

and of the Ministers, Deputy Ministers, Secretaries, Chief Engineers and Chief Public Works, from 1841 to 1888.

Secretaries.		Chief Engineers.		Chief Architects.	
Names.	Date of Appointment.	Names.	Date of Appointment.	Names.	Date of Appointment.
Thomas A. Begly...	Aug. 17, 1841.	Samuel Keefer...	Aug 17, 1841.	F. P. Rubidge, Architect and Asst. Engineer	Dec. 15, 1841.
Thomas A. Begly, under Act estab- lishing Dept. of Public Works	Sept. 25, 1847.				
.....	.....	John Page.....	Oct. 31, 1853.		
Toussaint Trudeau.	Dec. 13, 1859.				
Frederick Braun....	March 8, 1864.				
.....	.....	G. F. Baillairgé, Asst. Chief En- gineer	July 5, 1871.	Thos. S. Scott...	Feb. 7, 1872.
{ S. Chapleau	Oct. 4, 1879.	H. F. Perley.....	Nov. 25, 1880.	Thos. Fuller.....	Oct. 31, 1881.
{ F. H. Ennis.....	Nov. 4, 1880.				
{ A. Gobell.....	Jan. 23, 1885.				

APPENDIX No. 19.

OFFICIAL CORRESPONDENCE

From 1st July, 1867 to 30th June, 1888.

APPENDIX No. 19.

OFFICIAL CORRESPONDENCE.

Letters Received and Sent from 1st July, 1867, to 30th June, 1888.

Years.				Received.	Sent.
1867—	From	1st July	to 31st December	2,075	1,511
1868	do	1st January	to 31st December	3,498	2,317
1869	do	do	do	3,448	2,171
1870	do	do	do	4,961	3,185
1871	do	do	do	6,268	3,983
1872	do	do	do	8,333	4,428
1873	do	do	do	10,072	5,707
1874	do	do	do	9,800	5,043
1875	do	do	do	9,606	5,008
1876	do	do	do	7,971	4,773
1877	do	do	do	7,517	4,425
1878	do	do	do	6,886	4,041
1879	do	do	to 6th October	7,186	4,547
1879*	do	7th October	to 31st December	2,033	810
1880	do	1st January	do	8,451	4,410
1881	do	do	do	9,599	5,529
1882	do	do	do	10,505	5,699
1883	do	do	do	11,633	6,227
1884	do	do	do	13,114	6,903
1885	do	do	do	18,977	5,321
1886	do	do	do	9,644	5,352
1887	do	do	to 30th June	4,868	2,735
1887	do	1st July	do 1888	10,492	6,343

* By an Order in Council, approved on 19th May, 1879, published at page 1496, of the *Canada Gazette*, the 20th May of that year was fixed as the day for separating the Department of Railways and Canals from the Department of Public Works, in accordance with Act 42 Vic., cap. 7. The staff of officers and clerks of the Department of Public Works continued to manage in common the business of the two Departments until the 1st October, when an Order in Council was approved dividing the staff between the two Departments. The first letter of the new Department of Public Works was written on 7th October.

The above list does not include the correspondence of the chief officers of the Department with their assistants and the public, which averages over 10,000 letters per year, nor the Departmental and other cheques sent out, of which above 5,000 are mailed during each fiscal year.

† The decrease in the number of letters received and sent is not caused by any actual diminution of letters, but by a change in the manner of fying since 1st April, 1885. Up to that date all accounts were registered singly, and a letter accompanied each payment. Now, accounts are fyled by subjects, as many as thirty or forty accounts being sometimes covered by one number and printed slips have been substituted for the letters which formerly accompanied payments. A very considerable saving of time has been effected by these changes, and the business of the Department greatly facilitated.

APPENDIX No. 20.

YEARLY EXPENDITURE

IN EACH PROVINCE

ON

CONSTRUCTION AND IMPROVEMENTS

OF

PUBLIC WORKS, CANADA,

By O. DIONNE, Accountant.

APPENDIX No. 20.—ABSTRACT STATEMENT of Yearly Expenditure in each Province, on Construction and Improvements of Public Works, Canada, from 1st July, 1867, to 30th June, 1887.

Fiscal Year.	Nova Scotia.		P. E. Island.		New Brunswick.		Quebec.		Ontario.		Manitoba.		North-West Territories.		British Columbia.		Miscellaneous.		Total.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
1868...	485,206	86	.....	.....	22,090	19	138,939	77	133,510	38	.....	.....	.....	.....	.....	.....	130	18	779,877	98
1869...	213,068	11	.....	.....	109,372	81	62,432	99	182,298	76	.....	.....	.....	.....	.....	.....	.....	.....	570,285	80
1870...	470,800	64	.....	.....	1,020,317	42	387,909	49	202,915	99	52,565	60	16,232	30	.....	.....	.....	.....	2,099,751	44
1871...	1,631,816	09	.....	.....	909,169	15	1,393,851	24	263,730	86	72,717	16	17,443	35	.....	.....	.....	.....	3,835,803	00
1872...	1,798,130	55	.....	.....	2,544,835	81	1,670,732	69	768,459	05	146,805	44	.....	.....	274,683	44	.....	.....	7,206,413	30
1873...	1,553,752	15	.....	.....	2,879,278	32	1,614,502	99	1,097,752	09	131,128	07	.....	.....	143,292	65	.....	.....	7,432,076	82
1874...	1,127,944	47	.....	.....	2,141,317	86	1,524,390	78	1,533,625	49	120,806	13	.....	.....	206,341	75	.....	.....	6,729,524	67
Total	6,761,358	87	.....	.....	9,636,311	56	6,792,749	95	4,182,392	62	528,235	52	32,675	65	639,392	00	12,015	24	28,644,031	41
1875...	1,433,812	58	.....	.....	1,782,061	44	1,588,187	87	2,401,697	15	325,467	20	236,363	63	522,652	06	.....	.....	8,391,226	69
1876...	684,243	17	.....	.....	634,539	87	1,397,275	70	4,143,771	35	967,933	23	614,864	87	423,065	32	.....	.....	8,994,002	82
1877...	566,344	11	.....	.....	773,253	07	2,303,292	78	3,941,443	00	383,871	58	138,611	87	327,524	21	.....	.....	8,706,637	11
1878...	238,412	84	.....	.....	436,594	40	1,701,403	30	3,736,133	59	958,935	99	71,343	44	160,127	97	.....	.....	7,373,921	60
1879...	238,123	09	.....	.....	314,788	42	1,481,659	12	3,652,781	55	446,273	41	16,160	60	89,524	01	.....	.....	6,330,085	43
Total	3,169,935	79	.....	.....	3,941,227	20	8,471,918	77	17,875,826	64	3,083,271	41	1,077,334	41	1,523,913	57	55,766	56	39,794,673	15
1880...	169,014	87	.....	.....	432,862	85	2,724,999	97	3,656,606	62	1,708,014	88	67,387	99	144,545	54	.....	.....	8,985,731	07
1881...	260,043	29	.....	.....	363,893	26	1,500,736	14	4,047,365	07	947,639	03	45,261	13	1,057,396	36	.....	.....	8,280,641	17
1882...	363,971	93	.....	.....	263,395	20	1,509,636	04	2,676,566	33	59,063	32	1,754,678	21	1,729,138	91	.....	.....	36,036	23
1883...	560,158	53	.....	.....	630,297	27	2,192,518	17	3,389,204	64	81,321	08	4,190,399	58	3,861,694	00	.....	.....	15,040,652	76
1884...	1,603,310	55	.....	.....	714,796	96	2,311,488	25	6,861,955	48	184,161	40	80,424	16	6,821,660	95	.....	.....	69,469	08
1885...	421,428	44	.....	.....	736,212	39	1,573,185	61	7,751,253	57	167,765	69	123,961	13	4,409,686	65	.....	.....	60,670	08
1886...	411,712	51	.....	.....	755,542	72	2,047,360	65	3,228,275	25	268,780	31	214,961	60	1,443,420	22	.....	.....	24,964	71
1887...	686,260	61	.....	.....	451,846	85	1,486,949	51	2,711,889	89	127,717	77	6,568,191	70	2,298,570	91	.....	.....	7,146,794	70
Total	4,519,951	33	.....	.....	4,348,937	25	15,345,844	34	34,283,021	85	3,532,963	48	7,141,470	41	25,460,886	48	245,662	15	92,993,773	94
Grand Total.	14,441,345	99	.....	.....	17,916,476	01	30,610,413	06	66,341,141	11	7,678,201	76	313,443	95	161,372,678	50	.....	.....	.....	.....

O. DIONNE,
Accountant.

APPENDIX No. 21.

—

ENGINEERS AND THEIR ASSISTANTS EMPLOYED

ON

PUBLIC WORKS,

CANADA,

1815 to 1889.

SO FAR AS ASCERTAINED, EXCLUSIVE OF RAILWAYS, IN MOST CASES.

N.B.—Errors or omissions will be rectified in next annual report, if notice thereof is sent to the undersigned.

An Alphabetical List of Canal Superintendents, and another of the most important Works on which Engineers have reported, or been employed, will be published in a subsequent report.

OTTAWA, 24th November, 1888.

C. F. BAILLAIRGE,
D. M. P. W.

APPENDIX No. 21.

(Ref. No. 93,301.)

ENGINEERS employed on Public Works, Canada, 1817 to 1889, so far as ascertained, exclusive of Railways.

Engineers.	Works.	Dates of Employment.
Allison, J. O.....	Assistant Engineer, Harbours, Maritime Provinces.....	Oct., 1833-38.
Auderson, W. P.....	Chief Engineer, Department of Marine and Fisheries.....	23rd Oct., 1874-88.
Armstrong, Captain Charles Logie	Lake St. Peter, dredging, &c.....	1857-67.
Arnoldi, John Roger...	Superintendent dredge vessels and dredging, Ontario and Quebec.....	8th Dec., 1859.
	Mechanical Engineer, Public Buildings, Ottawa, &c.....	1880-83.
Asterbrooks, Captain..	Engineer Royal Artillery, first attempt to place a cable for Suspension Bridge at Ottawa.....	7th July, 1883-88.
Atherton, Charles.....	Lake St. Peter, dredging, in charge of surveys and investigations.....	1826.
	Specification of dredge vessels, &c.....	1842-43.
Austin, G. F.....	Chantry Island breakwater, Lake Huron, &c.....	9th Sept., 1842.
	Harbour surveys, Maritime Provinces.....	1875-82.
	River Ottawa bridge site survey at Portage du Fort, &c.....	1883-84.
Aylmer, J. A.....	Lachine Canal enlargement, engineering staff.....	1885-86.
	St. Anne Lock do	July, 1873-79.
	Resident Engineer, new locks and canals, River Trent—construction.....	do 1880-81.
Baillairgé, Charles....	Architect and Engineer, Public Works, Quebec and Ottawa Report on new gaol, Quebec.....	June, 1882-88.
	Joint Architect, Ottawa Parliament Buildings.....	1860-63.
	Louise basins and docks, &c., Quebec.....	11th Feb., 1863.
	Canals, harbours, roads, Provinces of Quebec and Ontario. Surveys.—Piers below Quebec, River l'Assomption, &c.....	1863-65.
Baillairgé, Geo. Fred..	Resident Engineer, Junction and Williamsburgh Canals....	1875-76.
	Chambly and Beauharnois Canals, surveys and claims....	22nd Sept., 1884.
	Saguenay, Metapediae, Gaspé and Temiscouata Roads, &c. Prepared Second General Report on Public Works.....	1846-1853.
	Cornwall, Beauharnois Canal weirs, &c.....	1853-1856.
	Channel sounded, River St. Lawrence, between Quebec and Montreal.....	1849-1864.
	Baie Verte Canal, proposed route and design.....	1858 to 1866.
	Location and design of lock, Lakes Muskoka and Rousseau Assistant Chief Engineer Public Works, Canada.....	1st July, 1867.
	Proposed Cedars Canal and River St. Lawrence survey....	1856-1870.
	Fort Frances Lock, Rainy Lake and Survey Harbour works, Quebec.....	1868-1869.
	Superintending Engineer Canals, Province of Quebec.....	Aug., 1870-73.
	Deputy Minister Public Works, Canada.....	June, July, 1866.
	Prepared Third General Report on Public Works.....	5th July, 1871-79.
	Member of Mechanics Institute of Civ. Eng., England.....	1872-73, 1875-76.
	Projected Murray Canal, Lake Ontario.....	1875-76.
Baird, N. H.....	Report on Beauharnois Canal project.....	32nd June, 1877-79.
	do on River Trent navigation project.....	4th Oct., 1879-83.
	Locks 134 by 33 feet; 5 feet water on sills. Work commenced 1837, and completed chiefly in 1844	1867-82.
	do on Welland Canal enlargement.....	1831.
		843.
		1835.
		1835-36.
		1837.

ENGINEERS Employed on Public Works, Canada—Continued.

Engineers.	Works.	Dates of Employment.
	Work commenced 30th November, 1824. Canal first opened 30th November, 1829. Original wooden locks 110 by 22 feet, with 7½ feet of water on sills. Died, Aug. 1849, at Brattleboro, Vt...	
Barclay, E. J.....	Reports on Roads and Bridges, Eastern Townships, P. Q.	1846-47-48.
Barrett, Alfred.....	Engineering Staff, St. Peter's Canal, Cape Breton.....	1872.
	Report on inland navigation between Lakes St. Francis and Ontario, also on Rapide Plat Canal project.....	1830.
	Grand River navigation—Report.....	7th Oct., 1843.
	Lachine Canal, 1st enlargement, and St. Ours lock and dam, &c.....	1841.
	Surveys River St. Charles and bridges, River Ottawa, at Vaudreuil, &c. Died, 18th July, 1849, at Montreal.....	1843-48.
Bayfield, Admiral Hy. W., R.N.	In charge of the Admiralty Survey of the River and Gulf of St. Lawrence.....	1817-60.
	Made reports respecting the deepening of Lake St. Peter.....	1831-35-46.
Beaudry, J. A. U.....	Engineering Staff, Public Works, harbour surveys, P. Q.	1893.
Belanger, Ernest.....	Assistant Engineer, harbour surveys, P. Q.	1834-87.
Belcher, A. J.	Assistant Engineer, New Canal Works, River Trent.	1882-88.
Belcher, Thos. Deaves.	Superintending Engineer, River Trent, canals, locks, slides, dams and booms, from Trenton, Lake Ontario, up to Lake Scugog.....	July, 1873, to 1884.
Bell, Andrew.....	New Carillon Canal on north side, also new slide on south side of the River Ottawa, and dam across the River Ottawa, Resident Engineer.....	June, 1870, to Nov., 1885.
	Employed by various parties, Arnprior, &c.....	1885 to 1889.
Bell, Capt.....	Superintendent dredging ship channel, Lake St. Peter.....	1852-86.
	Died fall of 1858.	
Bellingham, A.....	Assistant Resident Engineer, Lachine Canal, third enlargement, upper division.....	1873 to 1878.
	Left service 1st October, 1878.	
Bender, E. P.....	Engineering Staff, Public Works, harbours, Province of Quebec, &c.....	1880 to 1887.
Bennett, William..	Res. Eng. Esquimalt Graving Dock, Vancouver Island, British Columbia.....	1st Sept, 1883, to Jan., 1888.
Berlinguet, Thos.....	First employed on survey Princess Louise Docks at Quebec. Survey, Harbour of Three Rivers, &c., P. Q.	1875-76.
	Assistant, Hydrographic survey, Pte. aux Trembles to Cap Charles.....	1881-82.
	Resident Engineer, River St. Maurice, and Engineer Harbour Commissioners, Three Rivers, &c.....	July, 1823.
	Resident Engineer, lock and dam, River Yamaska, and various works at Sorel, River St. Francis, and River Nicolet.....	1894-88.
		1888.
Bertrand, Joseph Tétu	Engineering Staff, Public Works, Ottawa and harbour surveys.....	1884-88.
Bertrand, L. N.....	Engineering Staff, Public Works, Surveys, Quebec and Ontario.....	1884.
Bolton, Major D., R.E.	Description of dam at Long Island, on the Rideau Canal, built in 1836.....	1839.
Boswell, St. G.....	Engineering Staff, Graving Dock at Lévis, and Princess Louise Basins at, Quebec.....	1876-88.
Boulay Philéas.....	Engineering Staff, Canals, &c.....	15 March, 1870-71.
	Assistant, Cedars' Canal Survey.....	1872-73, 1875-76.
	At headquarters, Department Railways and Canals, &c.....	1876-88.
Boyd, John Edward...	Resident Engineer, European and North American Railway, by Government of New Brunswick.....	1858-60.

ENGINEERS Employed on Public Works, Canada—Continued.

Engineers.	Works.	Dates of Employment.
	Chief Engineer and General Superintendent of E. and N. A. Railway	Dec, 1860-67.
	Assistant Engineer, Department Public Works, Ottawa....	1st Sept, 1867-71.
	Chief Engineer of Government Railways, Prince Edward Island.....	10th May, 1871-75.
	Resident Engineer, North Shore Railway, by Government of Quebec.....	1876 and 1879.
	Engineer in charge of works, Maritime Provinces	May, 1880, to June, 1881.
	Engineering Staff at Headquarters, Ottawa.....	1881-83.
	Resident Engineer, Princess Louise Basin, Quebec, and graving dock at Levis, for Public Works Department... Died at Ottawa, Nov. 1887.	Sept., 1883, to Nov., 1887.
Breen, Thomas.....	Engineering Staff, Public Works, harbours, &c., Province of Quebec.	1882-88.
Brophy, G. Patrick.....	Engineering Staff, Public Works	July, 1867.
	Assistant Superintendent, Ottawa slides and booms	6th July, 1873.
	Superintendent do do	22nd July, 1875-88.
	J. B. Brophy acted as Superintendent 1st July 1879, to 1880.	
Brophy, John Byrne....	Assistant Superintending Engineer, Ottawa slides and booms.....	1st Jan., 1876.
	Superintending Engineer, Ottawa slides and booms.....	1st July, 1879.
	Resident Engineer on C. A.—U. P. C. Railway Division	1st April, 1880.
	Divisional Engineer, Cape Breton Railway	28th June, 1886.
Brotherton, A. S.....	Engineering Staff, Public Works, harbour surveys, &c., below Quebec.....	1881-82.
Browne, Edward.....	Report on back-waters, Newcastle District.....	18th Feb., 1858.
Brown, Gustavus A....	Assistant Engineer, Public Works, Maritime Provinces	1st July, 1872-86.
Burnett, Thomas.....	British Engineer, made survey and plans of Lachine Canal. Canal commenced, 17th July, 1821. do opened in August, 1824. Depth, 4½ water on lock sills. Stone Locks, 100 by 20 feet.	Spring of 1820.
Barwell.....	Survey of Goderich Harbour.....	1827.
By, Lieut.-Col., R. E....	Superintending Engineer of Rideau Canal—Ottawa to Kingston.....	Sept., 1826.
	Canal commenced, 21st Sept., 1826. do completed, 29th May, 1832. do 126½ miles long, with 47 locks, of 134 by 33 feet and 4½ feet water on sills.	
Carroll, Cyrus.....	Engineering Staff, Public Works, Harbours, Ontario.....	1884-86.
Chaloner, Charles E....	Public Works, Surveys, Manitoba and North-West Territories, &c.....	1882-83.
	Assistant of R. Steckel, Geodetic survey, River St. Lawrence between Montreal and Quebec, and River Richelieu, &c.....	1884-88.
Champion, A. J.....	Engineering Staff, Public Works, Maritime Provinces.	1888.
Charbonneau, Maxime.	Engineering Staff, Public Works, Manitoba and North-West Territories. River North Saskatchewan.....	1885-86.
	Died February, 1887.	
Casey, W. R.....	Cedars Canal route proposed on north side of River St. Lawrence. Plan, profile and estimate	1842.
Chetwood, Henry Waters King.....	Engineering Staff, Southern Division, Welland Canal Enlargement.....	February, 1863.
Oimon, Simon.....	Engineering Staff, Public Works, harbours, Quebec	1881-87.
	Resigned 11th Aug., 1887. Elected Member of Charlevoix for House of Commons 28th Sept., 1887...	
Clark, O.	Engineering Staff, New Canal Works, River Trent.....	1882 to 1886.

ENGINEERS Employed on Public Works, Canada—Continued.

Engineers.	Works.	Date of Employment.
Clarke, Thomas C.....	Ottawa River navigation to Lake Huron, survey	1859.
Cliff, John.....	Report on projected Ship Canal	2nd January, 1860.
Clowes, Samuel.....	Superintendent Harbour Works, Montreal	1832 to 1845.
	Rideau Canal, proposed works.....	1823.
	Welland Canal do	1824.
	Galops, Rapide Plat, Farran's Point and Cornwall Canals, General Report and Estimates submitted	1826.
Cole, Capt., R. E.....	Consulting Engineer, Cornwall Canal construction	1833.
	Canal commenced in 1835, opened December, 1843. Completed June, 1843.	
Cole, Major P., R. E... Conway, John	Report on causes of floods, River St. Lawrence, Montreal... Engineering Staff, Lachine Canal Enlargement	29th June, 1841. 1871-83.
	Assistant Engineer, St. Gabriel Basin, L. O.	1883-86.
	Engineer, Electric Light Apparatus, Lachine Canal, Montreal.	1886-88
Cornell, J.....	Engineering Staff Public Works, at Montreal, Lachine Canal, Enlargement	1843.
Coste, Louis.....	Engineering Staff Public Works, Ottawa, &c	1894-88.
Crawford, William....	Survey Beauharnois Canal, Enlargement projected	1872 to 1876.
	Assistant Engineer Welland Canal, Deepening to 14 feet... Resident Engineer Sault Ste. Marie Canal, Canada	1st June, 1886, to 1st August, 1887. August, 1887-88.
	First survey made in 1852.	
Crawley, Capt., H. O., R. E.	Reports on Baie Verte Canal project, to unite the Bay of Fundy with the Gulf of St. Lawrence	19th Jan., 1813, and 14th and 19th March, 1813.
Cunningham, Granville C.....	Resident Engineer, Prince Edward Island Railways, Assistant Engineer in charge of harbours, &c, Prince Edward Island, for Public Works Department	April, 1875 to 1878.
Curran, Veysie	Assistant Resident Engineer, Southern Division, Welland Canal Enlargement	November, 1873.
D'Amours, J. W	Engineering Staff, Public Works, British Columbia, Victoria, &c. Survey mouth of Fraser River, British Columbia	1885.
Dawson, Simon	River St. Maurice, slides and booms.....	1852-57.
	Route Lake Superior to Fort Garry, survey commenced	1857.
	Work commenced	1867.
	Col. Wolseley and troops passed	1870.
	Work completed for passage of immigrants	1871.
Déniel, Emile.....	Grenville Canal enlargement	Sept. 1872., to Oct. 1890.
	Panama Canal, Central America.....	Jan., Feb., March, 1888.
Denison, Lieut. W., R. E.....	Description of Rideau Canal dams, locks, &c, and of bridges across the River Ottawa	1839.
Dérôme, J. B.....	Piers, &c., Province of Quebec, Public Works Department. Eng. Staff, employed on Harbours and Roads.....	10th July, 1864. 1873-77.
Derbishire, Stewart ...	Carillon New Canal, slide and dam, River Ottawa	Aug., 1879.
Desbarats, G. J.....	Headquarters, Ottawa, Department of Railways and Canals	Jan., 1885-88.
Des Brisay, L. P. W....	Engineering Staff, Public Works, Calgary, Bow River bridge	18th March, 1887, to 30th April, 1888.
Desjardins, O.....	On survey ship channel between St Roch and Ile aux Coudres	1881.
Dickinson, John	Appointed commissioner to enquire into cause of floods between Montreal and Quebec	4th October, 1873.
Dickinson, Jos. E., M. A., Trinity College, Dublin.....	Assistant Engineer, Northern Division Welland Canal, 2nd enlargement	15th July, 1874, to 30th Dec., 1879.
	Died in Europe.	

ENGINEERS employed on Public Works, Canada—Continued.

Engineers.	Works.	Dates of Employment.
Doré, J. E.	Engineering Staff, canals, &c., P. Q. St. Zotique road dyke, protection wall on north shore of Lake St. Francis	1884-86. 1834-85.
Douglas, R. O.	Left service	1st Jan., 1888.
Drummond —, R. E.	Engineering Staff, Ottawa—canals, &c.	July, 1872-88.
Duberger, C. O.	Superintending Engineer, first Suspension bridge, Ottawa. Assistant Engineer, Public Works, harbour surveys, north shore River St. Lawrence, below Quebec.	1826. 1881.
Duchesneau, A.	Engineering Staff, Lachine Canal enlargement, &c., Montreal Division Superintending Engineer's office, Montreal.	July, 1873-81. Nov., 1881-88.
Duvernet, Lieut.-Col. Henry, R. E. of Royal Staff Corps	Report and estimates, proposed canal and lock at Ste. Anne, north side of River Ottawa, instead of old wooden lock between Ile Perrot and Vaudreuil, built in 1816 by the St. Andrew's Steam Forwarding Company, for steamers of 20 horse power	13th Dec., 1831. 14th March, 1832.
Eads, Jos. B., U. S.	Report on Toronto Harbour proposed improvements. Died, 8th March, 1887.	1888.
Eafard, Eugene.	Engineering Staff, Public Works, harbour surveys, P. Q.	1881.
Eafard, F. X.	do do	Sept. 1874-80.
Eaga, J. M.	Commissioner Rideau Canal	1828.
Eanshaw, Col., R. E.	Proposed Cedars Canal survey on north shore of River St. Lawrence	1872-73.
Earijans, F. O.	House Harbour, Magdalen Islands, Gulf of St. Lawrence ... Harbours, Ontario, &c. Died, May, 1882.	1874-75. 1875-81.
Fellowes, Charles L.	Served on examination of part of Dawson Route	1869.
Fleming, —.	Engineering Staff, surveys, &c., Welland Canal, 2nd Enlargement. Assistant Engineer, North Division Welland Canal, 2nd Enlargement.	1870-76. 1st July, 1876 to 30th May, 1882.
Fleming, —.	Recommends dredging River Richelieu so as to avoid building lock and dam at St. Ours	1829.
Forsyth, Robert	Dredging of River Richelieu commenced	1830-31.
Foulis, Robert.	Consulting Engineer, Williamsburgh and Cornwall Canals Superintending Engineer, Montreal Harbour and Ship Channel improvement, River St. Lawrence, Montreal to Quebec.	1834. 1855 to 1864.
Foulis, Robert.	Report on River St. John from Fredericton to Grand Falls, New Brunswick	31st Aug., 1826.
French, J. Barnard ...	Welland Canal Staff, North Division, 2nd Enlargement.	1876.
Frome, Lt. E. G., R. E.	Description of Rideau Canal and Chaudière Bridge.	28th Feb., 1837.
Gambie, F. O.	Assistant Engineer, Public Works, British Columbia. do in charge of Public Works, British Columbia.	1st May, 1881-86. 1st Jan., 1886-88.
Gambie, S.	Resident Engineer and Agent, Public Works Department, British Columbia	1st Jan., 1888-89.
Gamble, S.	Report on projected Caughnawaga Canal between River St. Lawrence and Lake Champlain.	1855-56.
Garon, L.	Assistant Engineer, Public Works, Harbour Surveys Ontario.	1880-81.
Gaudet, J. F.	Engineering Staff on Survey Dawson Route from Thunder Bay, Lake Superior to Fort Garry, Manitoba, 451 miles	1857-59.
Gauvreau, Pierre.	Engineering and architect Staff, Province of Quebec, Public Works Department	1850-67.
	Subsequently employed by Provincial Government of Quebec until his decease on the 16th May, 1884, at the age of 71.	

[1888]

ENGINEERS employed on Public Works, Canada—Continued.

Engineers.	Works.	Dates of Employment.
Geddes, —	Consulting Engineer with Capt. Cole, R. E., and Fleming, Williamsburgh and Cornwall Canals	1834.
Gisborne, F. N., M.E., Electrician, F. R. S. O., &c., &c.	Superintendent Government Telegraphs, Nova Scotia..... Laid Prince Edward Island Cable	1848-51. 1852.
Gouin, W. F.	Superintendent Government Telegraph and Signal Service, Canada..... Laid Gulf of St. Lawrence and Bay of Fundy Cables	1st May, 1879-88 1880.
Gourlay, Robert	do British Columbia Cables	1881-84.
Gourlay, Robert	Engineering Staff, Public Works, Ontario, Manitoba and North-West Territories	1884-88.
Gourlay, Robert	His views respecting Cornwall and Welland proposed canals, and improvement of the River St. Lawrence..... "Statistical Account of Canada," with map, published in London, England	1819. 1822.
Gray, Henry A.	Assistant Engineer, Intercolonial Railway	1867-74.
Gray, Henry A.	do Public Works Department	1881 to 1880.
Gray, Henry A.	Engineer in Charge of Harbours, Western Ontario.....	1881 to 1886.
Gray, Henry A.	Chief Assistant Engineer, Public Works at Ottawa	886 to 1885.
Gray, Henry A.	Resident Superintending Engineer, Public Works, Maritime Provinces	August, 1888-89.
Greene, D. M.—U.S.	Reports on Sawdust in Navigable Streams.....	10 Mar, 1871.
Greenwood, H	Engineering Staff, New Canal Works, River Trent.....	1883 to 1887.
Grondin, A. L.	Engineering Staff Public Works, Harbour Surveys, north shore River St. Lawrence	1883.
Guerin, Thomas	Engineering staff, Headquarters, Public Works.....	1st Sept., 1864-69.
Guerin, Thomas	Previously Professor Civil Engineering at McGill University, Montreal.	
Guerin, Thomas	Assistant Engineer of G. F. Baillairgé on Baie Verte Canal Survey.....	1870 to 1873.
Guerin, Thomas	Hydraulic Surveys, Montreal, Ottawa, Chaudière Falls and Manitoba, &c.....	1873-87.
Guerin, Thomas	Died suddenly in his office at Ottawa, 7th May, 1887.	
Gzowski, Lt.-Col. O. S.	Superintending Engineer, roads, harbours, &c, Western Ontario.....	1842 to 1848.
Gzowski, Lt.-Col. O. S.	Engineer of Harbour Works at Montreal	850 to 1853.
Gzowski, Lt.-Col. O. S.	Consulting Engineer, Ship Channel Improvement between Montreal and Quebec	1850 to 1853.
Gzowski, Lt.-Col. O. S.	Canal Commission, projected Enlargement, &c.....	16th Nov., 1870 to 1871.
Gzowski, Lt.-Col. O. S.	International Bridge across the Niagara	1871 to 1873.
Gzowski, Lt.-Col. O. S.	Report on Proposed Enlargement Welland Canal	14th Feb, 1873.
Gzowski, Lt.-Col. O. S.	do do Scheme Baie Verte Canal	18th do 1873.
Hale, W. D.	Specification for extension of piers at Port Stanley, Lake Erie.....	2nd Nov., 1849.
Hall, Francis Benj.	Welland Canal route, with Messrs Clowes and Roberts	1824.
Hall, Francis Benj.	Shubenacadie Canal, commenced 1827. Completed 1862..	1825.
Hall, Francis Benj.	Superintendent construction, Burlington Bay Canal.....	1825 to 1832.
Hall, Francis Benj.	Report on Baie Verte Canal project	1825.
Hall, Francis Benj.	Roads, Ontario	July, 1845.
Hall, Francis Benj.	Welland Canal commenced 30th November, 1824	
Hall, Francis Benj.	Opened 30th November, 1829, for vessels drawing 7½ feet water, and of 21½ feet, beam.	
Hall, Francis Benj.	Wooden locks, 110 × 22.	
Hamel, Félix M.	Engineering Staff, Public Works, Harbours, &c.....	1st March, 1867, to 1st Sept., 1868.
Hamel, Félix M.	do Intercolonial Railway, until	1st Sept., 1870.
Hamel, Félix M.	do Public Works, at Headquarters, until....	10th June, 1871.
Hamel, Félix M.	do Canadian Pacific Railway do	January, 1874.
Hamel, Félix M.	do Culbute Canal, River Ottawa do	August, 1874.

ENGINEERS employed on Public Works, Canada—Continued.

Engineers.	Works.	Dates of Employment
Hamel, Félix M.	Engineering Staff, Lock, &c, River aux Lièvres, Ottawa district, until	1837-38.
Harrington, Thos. W.	Engineering Staff, St. Lawrence and Ottawa Canals..... Assistant Engineer, Lachine, Chambly, Culbute Canals..... Assistant Superintending Engineer, Canals, Province of Quebec.....	19th July, 1870. 1st October, 1870. 1st May, 1875-87.
Harris, Major.—R.E.	Died 26th October, 1887. Rideau Canal, Report and Estimate jointly made with Col. J. O. Smith and Sir George Hoste. Locks to be 108 X 40 X 5 feet, water on sills	1825.
Haycock, Sam. H.	(Afterwards built 133 X 33 X 5 on sills.) Work commenced in 1826, and completed 29th May, 1832, under Col. By, R. E.	
Heckman, J. W.	Engineering Staff, Galons Canal Enlargement.....	August, 1879. 1886.
Hegan, J. B.	Engineering Staff, Public Works, river improvements..... Assistant Engineer, Intercolonial Railway	1869 to 1873. 1873 to 1880. 1882 to Sept., 1883.
	Assistant Engineer, Public Works, Maritime Provinces	Sept., 1883, to July, 1888.
	Engineer in charge of Public Works do	July, 1880-85.
Henry, George W.	Lachine Canal Enlargement, Lachine Division	
Henshaw, George H.	Left service July, 1885, for C. P. R. Resident Engineer, new lock and channel Ste. Anne de Bellevue, River Ottawa, north side	October, 1873-83. 1884.
	Paper on flood of River St. Lawrence	1887.
	Paper on Frozil tie, its nature and prevention, to the Canadian Society of Civil Engineers.	1st October, 1885, to 19 Nov., 1888.
Heyland, A. B.	Engineering Staff, Public Works, British Columbia.....	1st Oct., 1887-88.
Hill, A. E.	Engineering Staff, Public Works, British Columbia.....	
Hopkins, W. E.	Resident Engineer, Chamby Canal.....	October, 1831.
	Chamby Canal commenced. Locks 118 to 125 X 23½ with 7 feet water on sills.	
	Chamby Canal opened to navigation.....	17 Nov., 1843.
	St. Ours Lock and Dam proposed	1835.
Hoste, Lieut.-Col. Sir Geo., R. E.	Rideau Canal, Report and Estimates. Locks to be 108 X 20 and 5 feet depth on sills. (Altered to 133 X 33 X 5.)... Work commenced 1826, and completed 29th May, 1832, under Col. By, R. E.	1825.
Hounslow, T.; F. W., R. E. D.	Description of method of raising buildings by screws in Canada and the United States	18th Sept., 1841. 1875.
James, O.	On Southern division, Welland Canal, 2nd Enlargement....	
Jarvis, J. B.	Report on projected Caughnawaga Canal from River St. Lawrence to Lake Champlain, or from Caughnawaga to St. John, recommending its construction, as proposed by J. B. Mills, 19th February, 1848	13th Feb., 1855.
Jebb, Capt., R. E.	Routes for Rideau Canal proposed between Ottawa and Kingston	1815 to 1817.
Joslin, H. K.	Lachine Canal, 2nd Enlargement, Resident Engineer, Montreal Division	July, 1872-82.
	Left service 1st May, 1882. Died in November, 1887	
Keefe, George.	Resident Engineer, first construction of lower division of Cornwall Canal	1831-43.
	Resident Engineer in charge of Chamby Canal, completion and improvements	1844-47.
Keefe, Samuel.	Chief Engineer, Public Works, Ontario and Quebec..... do Superintending Engineer, Grand Trunk Railway..... Inspector of Railways..... Assistant Commissioner of Public Works..... Canal Commission.....	17th Aug., 1841-53 1853 to 1859. 1857-84. 6th May, 1858-61. 16th Nov., 1870-71.

ENGINEERS employed on Public Works, Canada.—Continued.

Engineers.	Works.	Dates of Employment.
	Report on proposed Welland Canal Enlargement.....	14th Feb., 1873.
	do do Baie Verte Canal route, &c.....	18th Feb., 1873.
	President Canadian Society of Civil Engineers.....	1888.
Keefe, Thomas O.	Assistant Engineer, Welland Canal.....	1842-45.
	River Ottawa slides and booms.....	1846 to 1849.
	River St. Lawrence improvements.....	1849 to 1851.
	Survey and design for Victoria Bridge.....	1851-52.
	Consulting Engineer, Ship Channel and Montreal Harbour.	1853 to 1855.
	Hamilton Water Works.....	1857-59.
	Georgian Bay Canal project, report.....	1863.
	Chief Executive Committee of Canada at Paris Exhibition.	1878.
	Montreal Water Works, &c.....	1878 to 1887.
	First President Canadian Society of Civil Engineers.....	24th June, 1887.
	President American Society of Civil Engineers.....	1888.
	Montreal Flood Commission.....	1886-88.
Keely, D. H.	Assistant Superintendent Government Telegraph Lines of Canada.....	1st March, 1882-88.
Keller, Capt. L.	Engineering Staff, Public Works, Hydrographic survey, Pointe aux Trembles to Cap Charles, River St. Lawrence, &c.....	1882-84.
Kelly, Athol D.	Engineering Staff, Welland Canal Enlargement, North Division.....	1875.
Kennedy, John.	Chief Engineer, harbour improvements, Montreal, and dredging of River St. Lawrence, Montreal to Quebec.....	20th April, 1875-89.
	Vice-President Canadian Society of Civil Engineers.....	24th June, 1887.
	Montreal Flood Commission.....	1886-88.
Kierkowski.	Engineering Staff, Beauharnois Canal.....	1842 to 1845.
Killaly, Hon. H. H.	Survey with N. H. Baird for 1st Enlargement of Welland Canal.....	1837.
	Chairman Board of Works, Ontario and Quebec.....	20th Dec., 1841.
	Specification of works at Windsor Harbour, Lake Ontario.	1st May, 1843.
	Assistant Commissioner of Public Works, Windsor Harbour, Lake Ontario.....	15th Feb., 1851.
	Special reports on Sant Ste Marie, Goderich Harbour Piers below Quebec, Lake St. Peter, Pointe Pelée Lighthouse, &c.....	1843 to 1862.
	Died 28th March, 1874. Aged 72.	
Killaly, H. H., jun.	Resident Engineer, Upper Division of Lachine Canal, 2nd Enlargement.....	Feb., 1876-85.
	Cornwall Canal Enlargement, upper half.....	1st July, 1885-88.
	Rapide Plat Canal, &c, Enlargement, &c.....	Dec., 1881-88.
King, Chester Henry Waters.	Engineering Staff, Southern Division, Welland Canal Enlargement.....	Feb., 1883.
King, William.	Assistant Mechanical Engineer, Ottawa, &c.....	26th Dec., 1878-83.
	Public buildings and dredges.	
Kingsford, William.	Engineering Staff, Lachine Canal Survey.....	1847.
	On particular service until.....	June, 1873.
	Engineer in charge of harbour works, Ontario.....	June, 1873 to 1880.
	Transferred to Department of Railways and Canals.....	1880.
Lafleur, Eugène D.	Engineering Staff, Public Works at Ottawa.....	27th Sep., 1881.
	Assistant Engineer, Hydrographic survey, River St Lawrence.....	July, 1883 to 1884.
	Harbour Works, Ontario, Quebec and New Brunswick.....	1884-88.
Laforge, H. Laforce.	Princes Louise Basins, Quebec, and Pointe Lévis Graving Dock.....	1884-88.
Languedoc, G. de G.	Grenville Canal Enlargement.....	May, 1879 to 1887.
Lantier, E.	Engineering Staff, Survey proposed Cedars Canal.....	1872-73.
Larue, Adolphe.	Survey of Lake St. Louis.....	1836.
Lefebvre, Jean.	Engineering Staff, Metapedia Road S. Division, Assistant of G. F. Baillairgé.....	1857 to 1867.

ENGINEERS employed on Public Works, Canada—Continued.

Engineers.	Works.	Dates of Employment.
Legge, Charles.	Engineering Staff at Headquarters, Montreal, and on weirs, &c., of canals below Prescott.....	1846 to 1854.
	Afterwards on railway service, &c. Died.....	
Lepage, J. B.	Engineering Staff, Public Works, harbour surveys and river improvements.....	1880-88.
	Previously in charge of Colonization Roads since 1857.	
Lepage, Samuel.....	Engineering Staff, Public Works, harbour surveys below Quebec.....	1883.
Leprohon, C. de B.....	Engineering Staff, Lachine Canal Enlargement, Lachine Division.....	Oct., 1875-85.
	Left service July, 1885, for Corporation, Montreal.	
Leslie, William Lewis.	Engineering Staff, S. Division, Welland Canal Enlargement.....	Oct., 1872.
Lewis, Col., R. E.	Commissioner, Rideau Canal.....	Spring, 1828.
Light Alex. L.	Assistant Engineer on Western Roads, Ontario, under Lt. Col. C. S. Gzowski.....	1842 to 1848.
Lightfoot, F. C.	Engineering Staff, surveys of Harbours and Rivers.....	July, 1874-79.
	Employed in Chief Engineer's Office.....	1879-88.
Lindsay, John.....	Engineer.—Survey headwaters River Ottawa.....	15th June, 1880.
	Died, 28 Sept., 1880, at Mattawa.	
Lyons, James.....	Superintending Engineer, River Tient Works—improvements; lighthouses, River St. Lawrence, &c.....	1843-55.
Macdonald, J. Frobisher	Cornwall Canal, &c.....	1842-43.
	Superintending Engineer, Canals, Lachine, Chambly, St. Ours, &c.....	1848-52.
	Piers below Quebec.....	1849.
	River St. Maurice, slides and booms.....	1851-52.
	Temiscouata Road, commenced 1856, opened 1861, completed 1866.....	1853.
	Died at Toronto in the autumn of 1857.	
Macdougall, Alan	Engineering Staff, Public Works, harbours, &c., Ontario	Sept., 1873.
Maillefert	Submarine Engineer, examined River St. Lawrence Rapids from Lake Ontario to foot of Lake St. Louis at Lachine.....	1854.
Maine, Charles.....	Engineering Staff, harbours of Three Rivers, River St. Maurice slides, dams and booms, etc.....	1886-88.
Marceau, Ernest.....	Lachine Canal Enlargement.....	July, 1876
	Grenville Canal and Ste. Anne Lock Enlargement.....	Aug., 1877-81.
	Assistant Engineer, Ottawa River canals, &c.....	Nov. 1881-88.
McAlpine, Hon. W. J., United States.	Report on Saw Dust in Ottawa River, &c.....	1st March, 1871.
	Report on proposed Welland Canal Enlargement.....	14th Feb., 1873.
McCarthy, Charles	Engineering Staff, Public Works, at Headquarters, &c.....	1857-84.
	Superannuated 1st July, 1884.	
McCarthy, C. J.	Engineering Staff, Public Works, roads, canals, &c.....	Sept., 1872.
McCarthy, James M....	Engineering Staff, Public Works, under Thos. Guerin.....	1883-84.
McCarthy, William	Engineering Staff, Public Works, river works, &c.....	1884-86.
	Previously employed on railways.	
McCordock, W. J.....	Engineering Staff, superintendent of dredging Maritime Provinces.....	1870-88.
McGreevy, Charles....	Engineering Staff, Public Works, harbour surveys.....	1881-83.
McGreevy, Robert.....	Engineering Staff, Public Works, harbour surveys.....	1881-86.
McKay, E. B.....	Assistant Engineer on Cowichan River, British Columbia.....	1st Sept., 1887, to 2nd Feb., 1888.
McLaughlin, Geo. E. ...	Assistant Engineer, Public Works, Maritime Provinces.....	1872-81.
	Engineer in charge Public Works, Maritime Provinces. Died, 6th October, 1883.	1881 to 1883.
McNab, Alexander.....	Engineer in charge, construction of St. Peters Canal for Government of Nova Scotia.....	July, 1865-67.
	Transferred to Department Public Works.....	July, 1867-72.

ENGINEERS employed on Public Works, Canada—Continued.

Engineers.	Works.	Dates of Employment.
	Appointed Engineer of Intercolonial Railway, in operation. Canal commenced by Nova Scotia Government 1854. Canal completed by Dominion Government. 5th August, 1889.	November, 1872.
McNaughton, Chas. E.	Engineering Staff, Welland Canal Enlargement, Northern Division	1875.
McTaggart, J.—Eng...	Examination and Report on Rideau Canal	1827-28.
Melhuish, Capt., R.E..	Account of demolition of Glacière Bastion, Quebec	1828.
	Consulting Engineer, Chambly Canal	1831.
Merrill, Horace	Superintending Engineer, Ottawa River slides and booms.	20th January, 1849, 22nd July, 1875.
	St. Maurice slides at Shawenegan and Grand Mère, first designed	1852.
	Carillon dam across the River Ottawa	June, 1879, to 1883.
	Died 22nd May, 1883.	
Merritt, Thomas	Engineering Staff, Welland Canal Enlargement, Northern Division	1875.
Michaud, O. E.	Assistant Engineer of G. F. Baillairgé on survey of Gaspé and Ste. Anne des Monts Road, north shore, Gulf of St. Lawrence	1861-62.
	Engineering Staff, Public Works, harbour works, &c.	1st Nov., 1864-70.
	On Pacific Railway survey, British Columbia	1871 to 1873.
	Resident Engineer, lock and dam, River Yamaska. R. St Francis and Nicolet, dredging and improvement	1877 to 1888.
	Resident Engineer, harbour works, south shore, River St. Lawrence	1888-89.
Michaud, Oléophas	Engineering Staff, Public Works, harbour surveys	June, 1873.
	do do do do	1884-85, 1887-88.
Millett, Herbert Alfred	Engineering Staff, Southern Division, Welland Canal Enlargement	August 1881.
Millidge, E. G.	Assistant Engineer, Public Works, Maritime Provinces	1872 to 1888.
	Resident Engineer, St. Peter's Canal, Cape Breton, &c.	1875 to 1881.
	Canal commenced by Nova Scotia Government in September, 1854, suspended 1856, resumed in 1866, and completed in 1869.	
Mills, J. B.	Projected Cedars Canal	1833.
	Cornwall and Williamsburgh Canals	1833-48.
	Projected Caughnawaga Canal	1847-48.
	Died towards 1871.	
Minnitte, R. O.	Baie Verte Canal, first survey for a canal of about 4 feet draught, to be fed by fresh water, through valley of Au Lac to the Missiguash Lakes and thence to River Tidnish	October, 1822.
Monro, Thomas	On Grand Trunk Railway, surveys and construction, Montreal to Kingston, and St. Lawrence Bridge survey, Montreal; also, Water Works survey and plan, Montreal	1850 to 1857.
	Assistant Engineer, Hamilton Water Works; Resident Engineer, Hamilton and Port Dover Railway	1857 to 1859.
	Public Works, Ontario, &c., Harbours of Refuge, &c.	February, 1860-68.
	Inspector of Railways	1863.
	Survey, Lake Shebandowan on the Dawson route	1869.
	Welland Canal Enlargement, survey and location	1870-71.
	Engineer in charge of Welland Canal	July, 1872, to 31st January, 1873.
	Resident Engineer, Northern Division, Welland Canal Enlargement	1873-88.
	Invited to International Congress of Navigation at Brussels. On Toronto and Georgian Bay, proposed Canal, in charge of summit level survey	30th April, 1885.
	Engineer of Water Works, Pit Hole City, Pennsylvania	1857.
	Assistant Engineer, preliminary location and construction Intercolonial Railway	1865.
		1868-70.

ENGINEERS Employed on Public Works, Canada—Continued.

Engineers.	Works.	Dates of Employment.
Mooney, William.....	Engineering Staff, Lachine Canal Enlargement, Montreal Division	1873.
	Yamaska Lock and dam, &c, Assistant Engineer.....	1880-84.
	Died 2nd January, 1885.	
Mothersill, G. A.	Chief Engineer's Staff, Headquarters, Ottawa	May, 1873-88.
Murdoch, William.....	Collingwood Breakwater, Lake Huron.....	1871.
	Port Arthur, River Kaministiquia, &c., Ontario, Harbour works, Resident Engineer, Public Works	15th Oct., 1884-88.
	Previously employed, chiefly on the Canadian Pacific, Pictou and Trenton, Manitoba and South Western, North-West Central and Hudson Bay, Railways, as Resident, District or Chief Engineer	1871 to 1884.
	First Superintendent, Ottawa River slides and booms.....	1843 to 1846.
Nagle, Gerald J.....	Specification, River Trent slides and booms	28th June, 1843.
	Floods at Montreal, Assistant Harbour Engineer.....	1884.
Nelson, J. M.	Rideau Canal route surveyed under his orders by Captain Jebb, R.E.	1815.
Nichols, Col., Commanding R.E.	Chief Engineer harbour works of Montreal, and ship channel, River St. Lawrence, from Montreal to Quebec	1884 to 1875.
Nish, A. G.	Afterwards contractor on Government works at Esquimalt graving dock, British Columbia, &c., up to 1887.....	24th Feb., 1880-87.
	Died 31st January, 1888.	
Norman, Thomas E. ...	Chats Canal, north side River Ottawa	1853.
	Report on survey of the islands and on the water power of the Chats rapids, River Ottawa	1st March, 1858.
Normand, J. B.....	River St. Maurice, slides, booms, dams, piers	1853-88.
	Appointed Commissioner to report on causes of floods between Quebec and Montreal.....	4th Oct., 1873.
	Report on causes of floods.....	21st Feb., 1874.
	Acting Superintendent, River St. Maurice, slides and booms.....	1875-76.
Odlum, Ed. John.....	Assistant Engineer, Welland Canal Enlargement, Southern Division	Nov., 1872-88.
Oldfield, Lieut.-Col. J., Commanding R.E.....	Report on experiments, blowing in gates at Quebec.....	11th, 13th July, 1840
Ostell, John.....	Architect, Surveyor and Engineer	1847-48.
Page, John, sen.....	Resident Engineer, Welland Canal.....	1842.
	Assistant Chief Engineer, Welland Canal	Sept., 1842.
	Resident Engineer, Junction and Williamsburgh Canal....	1850-51.
	Superintending Engineer, canals below Kingston.....	1852-53.
	Chief Engineer, Public Works, Provinces of Quebec and Ontario	5th Nov., 1853.
	Deputy Commissioner, Public Works, Quebec and Ontario.	8th March, 1864.
	Chief Engineer, Public Works, Canada.....	15th March, 1884.
	Welland Canal Enlargement, survey commenced	1870.
	Reports on Enlargement of canals, Lake Erie to Montreal.	1872 to 1877.
	Report on proposed Baie Verte Canal.....	10th Dec., 1873.
	Special and General Report on Canals, River St. Lawrence	16th Feb., 1880.
	Chief Engineer of canals of Canada	1879-88
Page, John, jun.....	Lachine Canal Enlargement, Engineering Staff.....	April, 1876-79.
	Assistant Engineer, Cornwall Canal	1880-85.
	Died 14th April, 1885.	
Papineau, L. G.	Engineering Staff, Public Works, at Montreal, &c.....	1878-80.
	do do Chambly Canal, &c.	1881-83.
	do do River Richelieu survey, &c.....	1884-88.
Painchaud, Antoine....	Resident Engineer, construction of roads between Gaspé Basin and the St. Lawrence.....	1858-67.
Parent, E. H.....	Seigniorial Cadastral Office	1861-64.
	At headquarters and on surveys, &c.....	15th Sept., 1864-71.
	Resident Engineer, Grenville Canal.....	July, 1872-78.
	Superintending Engineer, Carillon, Grenville, Outbute Canals.....	4th Feb., 1879.

ENGINEERS employed on Public Works, Canada—Continued.

Engineers.	Works.	Dates of Employment.
	Superintending Engineer, Lachine, Beauharnois, Chambly Canals, St. Ours Lock and Dam, &c.....	12th May, 1880-88.
Pariseau, L. S.....	Engineering Staff, Grenville Canal Enlargement.....	1878 to July, 1884.
	do River Richelieu survey.....	1885-88.
Pearse, B. W.....	Resident Engineer, Public Works, British Columbia.....	July, 1871 to 1881.
Perley, George E.....	Engineering Staff, Ottawa.....	2nd June, 1884-88.
	Kiug-ton graving dock.....	June, 1888.
Perley, H. F.....	Engineer Staff, Government of New Brunswick.....	Feb., 1848, to June, 1852.
	do do.....	Aug, 1856, to Dec., 1860.
	do Nova Scotia.....	May, 1863, to Aug., 1865.
	Engineer in charge of Government Railways, New Brunswick.....	May, 1870, to May, 1872.
	Engineer in charge of St. Peter's Canal, Cape Breton.....	31st Jan., 1880-88.
	Superintending Engineer, Public Works, Maritime Provinces, Federal Government.....	1st May, 1872.
	Chief Engineer, Public Works, Canada.....	25th Nov., 1880.
	Chief Engineer, harbour works, Quebec, graving dock, Lévis	Sept., 1883-88.
	Chief Engineer, ship channel, Montreal to Quebec.....	31st Dec., 1888.
	Vice President, Canadian Society of Civil Engineers.....	14th June, 1887.
	Montreal Flood Commission.....	1886-88.
Ferry, Capt., Geo. H....	Chats Canal, Ottawa and French River surveys.....	1853-58.
	Resident Engineer, Culbute Canal, Upper Ottawa.....	Sept., 1873-87.
	Died 1888.	
Phillpotts, Lieut.-Col., R. E.....	Engineer in charge of Cornwall Canal construction.....	1836.
	Reports on inland navigation of Canada.....	31st Dec., 1839, to 3rd Aug., 1840.
	Report on proposed Enlargement of Welland Canal.....	1841.
Pilkington, Woodford.	Resident Engineer, harbour works, Quebec, and graving dock, Lévis.....	1876 to 1883.
Piper, Capt., R. E.....	Commissioner harbor works, Montreal.....	1830-32.
Pound, Nicholas.....	Engineering Staff, Public Works, harbour surveys.....	1888.
Power, S.....	Engineering Staff on Welland Canal.....	1842-45.
	Specification for construction of lock gates, Welland Canal	Oct., 1843.
Raaslof, Col. de, Russian Engineer.....	Submarine Engineer. Examined River St. Lawrence rapids from Lake Ontario down to foot of Lake St. Louis, at Lachine, with Maillefert.....	1854.
Randall, —.....	Report on Welland Canal, in progress.....	31 May, 1830.
Ranney, G. W.....	Superintending Engineer, River Trent Canals, slides, dams and booms, from Trenton, Lake Ontario, up to Lake Scugog, inclusive.....	4th May, 1855, to July, 1873.
Rheaume, L. N.....	Engineering Staff, Lachine Canal, second Enlargement.....	1st Nov., 1877-84.
	Rapide Plat, canal Enlargement.....	Dec., 1884
	Cornwall Canal.....	1st July, 1885-88.
Richard, J. F.....	Harbour surveys, Province of Quebec.....	1881-88.
Rigney, James.....	Engineering Staff, roads, Eastern Townships, P. Q.....	1842.
	Assistant Engineer, River Trent Works at Bobcaygeon, &c. Died in California, 6th August, 1863.....	1843-49.
Ritchie, Thomas.....	Engineering Staff, Maritime Provinces.....	1888.
Roberts, U.S. Eng.	Examination of route for projected Welland Canal with Messrs. Hall and Clowes, British Engineers.....	1824.
	Canal commenced 30th Nov., 1824.	
	do opened 30th do 1829.	
	Wooden locks 110 by 22; 7½ feet water on sills.	
Robertson, G. E.....	Engineering Staff, Lachine Canal, second Enlargement, Lower or Montreal Division, &c.....	Aug., 1873-85.

ENGINEERS employed on Public Works, Canada—Continued.

Engineers.	Works.	Dates of Employment.
Robinson, Arthur G....	Cornwall Canal Enlargement, Upper Half	July, 1885-88.
Rogers, R. B.....	Assistant Engineer, Lachine and Chambly Canals	1843-48.
	Assistant Engineer, River Trent Slides, Booms and Canals	1878 to 1881.
	do Midland Division, Grand Trunk Railway	1881 to 1882.
	do Survey Trent Valley Canal	1882 to 1883.
	Superintending Engineer, River Trent Slides, Booms and Locks	1st July, 1884-88.
Rosa Joseph	Engineering Staff, roads, bridges, piers, harbours and river improvements, &c, Province of Quebec	29th May, 1866-88.
Rosamond, Joseph A....	Report River St. Francis, Pierreville Mills	13th July, 1875.
	Engineering Staff, Lachine Canal Enlargement	June, 1876-82.
	Resident Engineer Murray Canal, Lake Ontario.....	June, 1882, to '89.
Ross, John LeBreton...	Engineering Staff, Public Works Ontario and Quebec.....	December, 1856-76.
	Died, May, 1876.	
Rowan, James H.....	Engineering Staff Public Works, canals and railways.....	May, 1860-72.
	Subsequently District Engineer, Canadian Pacific Railway, Manitoba.	
Roy, Charles F.....	Harbours, Province of Quebec and Maritime Provinces	1879-80.
	Ship Channel between St. Roch and Ile-aux-Coudres	1881.
	Was elected for the County of Kamourask as Member of the House of Commons, 1877-78.	
	Died 13th April, 1882.	
Roy, George P.....	Engineering Staff, Public Works, harbours, Quebec	1881-82, 1884.
Roy, Joseph R.....	Engineering Staff Public Works, river and harbour surveys, Quebec.....	1883-84.
Royal Staff Corps, Imperial Government...	Cascades, Split Rock, Coteau du Lac, Old Fort. Canals enlarged, locks 12 feet wide, water 3½ feet	1817.
	Ordnance Canals, north side River Ottawa at Carillon. Chute à Blondeau and Grenville. Locks 108 by 20 and 130½ by 32½, with 6 ft. water on sills, designed	1819.
	Completed	1833.
Rubidge, F. P.	Assistant Chief, Engineer Public Works and Architect of Canada prior to and after Confederation.....	15th Dec., 1841, to July, 1871.
	Report on proposed landing piers below Quebec	15th Nov., 1846.
	In charge of surveys and investigations, &c., Lake St. Peter.	1847.
	Report on River L'Assomption lock, dam and dredging	27th Dec., 1848.
	do bridges, &c., Province of Quebec, &c.....	29th Nov., 1848.
	Reports on buildings and other works.....	1846 to 1871.
	Superannuated.....	July, 1871.
Rubidge, Thomas S....	Engineering Staff, Williamsburgh Canal, construction	1844.
	Superintending Engineer, deepening Galops Rapids, work commenced 1876 and completed 1882.....	1875 to 1892.
	Superintending Engineer, Murray Canal, between Bay of Quinté and Presqu'île Bay, north shore Lake Ontario...	1881 to 1886.
	Superintending Engineer, Burleigh Canal, Buckhorn Canal, Fenelon Falls Canal, &c., on the River Trent, works commenced 1882, completed 1888.....	1881 to 1888.
	Superintending Engineer, Williamsburgh Canals. Enlargement, &c	1880.
	Superintending Engineer, Cornwall Canal Enlargement, &c Work commenced 1876 on lower half from Cornwall upwards.	1876-1888.
Russell, Lindsay A.....	Engineering Staff, Public Works, Survey Dawson Route, Fort William on River Kamistiquia near Thunder Bay, Lake Superior, to Fort Garry (Winnipeg), Manitoba.....	1857-1859.
Russell, William.....	Superintending Engineer, roads and bridges along north shore Baie des Chaleurs from Cross Point to Gaspé	1841-1847.
	Rimouki bridge, &c.	1849.

[1888]

ENGINEERS Employed on Public Works, Canada—Continued.

Engineers.	Works.	Dates of Employment.
Scott, David.....	Assistant Engineer, Ottawa River slides and booms.....	1st Oct., 1854-89.
Scott, W. L.....	Assistant Engineer, Montreal Harbour Commissioners.....	19th May, 1875.
Secord, William F.....	Engineering Staff, S. Division, Welland Canal Enlargement.....	Oct., 1872.
Shanly, Frank.....	Formerly City Engineer of Toronto. Appointed Chief Engineer, Intercolonial Railway..... Died 13th Sept., 1882.	23rd June, 1880.
Shanly, Robert.....	Ottawa Canal survey to Lake Huron,.....	1857-58.
Shanly, Walter.....	Superintending Engineer, Beauharnois Canal construction. Proposed Ship Canals, River Ottawa, Montreal to Lake Huron.....	1842-48. 1857-58.
	Inspector of Railways and Engineer on various works..... Elected Member of the House of Commons, 1863-72, July, 1885-89.	29th Oct., 1864-88.
Shaw, W. M.....	Specifications, &c., Hamilton and Port Dover Road, London and Brantford Brantford and Woodstock.....	1842-44.
Simmons, Lieut J. A., Royal Engineer.....	Report of an experiment made at Quebec, 13th July, 1840, to destroy a barrier gate by gunpowder.....	17th July, 1840.
Sims, A. H.....	Reports on roads, &c., District of Gaspé.....	1847-48.
Simpson, Frank.....	Engineering Staff, Welland Canal, N. Division.....	1876.
Sippell, John G.....	Superintending Engineer, canals, Province of Quebec..... Superintending Engineer, Lachine and Ottawa Canals Enlargement..... Died, 26th September, 1879.	July, 1853 to 1877. 1870 to 1879.
Sirois, Joseph Eustache	Engineering Staff, harbour works below Quebec and straightening of ship channel between Quebec and Ile-aux-Coudres.....	1881-88.
Slater, James Dyson...	Welland Canal, Engineering Staff..... Superintending Engineer, Rideau Canal, &c..... Resigned on 12th September, 1872. Died, 26th October, 1876.	1842-46. 10th June, 1850, to 1st Oct., 1872.
Smith, D. C.....	Superintendent of lighthouses, Ontario, &c.....	21st June, 1855.
Smith, Colonel J. C., Royal Engineer.....	Joint Report and Estimate of proposed Rideau Canal Works, together with Lieut. Col. Sir G. Hoste and Major Harris, R. E., recommending locks 108 by 20 feet with a depth of 5 feet water.....	1825.
Snow, W. B.....	Engineering Staff, Public Works, Ottawa..... Harbour surveys, Ontario, Quebec and Maritime Provinces Previously employed chiefly on railways and other important works in England where he acted as agent to the Bishop of Durham, after which he was employed in Africa..... On various works in Canada.....	1st Aug., 1880-88. 1882 to 1887. 1837 to 1876. 1876 to 1880.
Soare, W. F.....	Engineering Staff, Public Works, harbours, Ontario.....	1885.
Spence, J. B.....	Engineering Staff, Railways and Canals, Ottawa, &c.....	Oct., 1876-88.
Starke, David.....	Secretary Commission of Enquiry, Ottawa Parliament Buildings..... Report on supplementary survey, Baie Verte Canal..... Superintending Engineer, River Ottawa Canals..... do River Trent, New Works, completion	1862-63. 27th Dec., 1872. 1st May, 1880-88. April, 1887-88.
St. George, Percival W.	On Flood Commission, Montreal..... Engineer and road surveyor, Corporation of Montreal.....	1886-88. 1888 and previous
St. Laurent, Arthur... Steckel, Louis Joseph, René.....	Engineering Staff, Public Works, harbour surveys, P.Q..... Assistant Engineer of G. F. Baillairgé on survey of south shore St. Lawrence, Gulf Road, Ste. Anne des Monts to Cape Rosiers and Gaspé Basin..... Engineering Staff, Public Works, Ontario and Quebec..... Survey and borings, Princess Louise Basins, Quebec..... Engineering Staff, Chief Clerk, Canada.....	1885-88. Jan., 1861. April, 1863-74. 1875-76. 1st July, 1880.

ENGINEERS employed on Public Works, Canada—Continued.

Engineers.	Works.	Dates of Employment.
	Hydrographic survey and Geodetic Levels, Rivers St. Lawrence and Richelieu.....	July, 1881-88.
	Hydrographic survey, Pointe aux Trembles to Cap à la Roch, River St. Lawrence.....	1881, 82, 83.
Stevenson, Alexander.	Survey with André Trudeau for projected canal between Lakes St. Francis and St. Louis.....	1830-31.
	Report on projected Beauharnois Canal by A. Stevenson and N. H. Baird.....	1835.
	Adopted on recommendation of Samuel Keefer in his Report, 17th February, 1842.	
Stewart, James.....	Engineering Staff, Public Works, &c., on various works... Map of ice shelves at Montreal, St. Ours Lock, Beauharnois Canal.....	1843 to 1858. 1843-44-45.
	Road proposed from Malbaie to Ha! Ha! Bay, Saguenay....	1847.
	Survey and plans, proposed piers below Quebec.....	1846-47.
	Beauharnois and Lachine Canal surveys and new works....	1847-54.
	On Grand Trunk Railway.....	1854-55-56.
	Ottawa and Lake Huron proposed ship canal survey.....	1857-58.
	First General Report on Public Works up to 1848.	
Stoker, George.....	Assistant Engineer, Welland Canal.....	1864.
Sullivan, J. H.....	Engineering Staff, Public Works, improvement of rivers, &c.....	1880-87.
	Resident Engineer, deepening feeder, Lake St. Francis to River St. Louis.....	1883-85.
	River Assiniboine, improvement.....	1886.
Summerville, Peter....	Assistant Engineer, Public Works, surveys Victoria Harbour and Fraser River, British Columbia.....	1st August, 1883, to 6th July, 1887.
Sutcliffe, John.....	Engineering Staff, Lachine Canal Enlargement..... do Ste. Anne Canal.....	15th July, 1872-81. July, 1881-86.
	St. Gabriel Basins, Lachine Canal.....	Aug., 1883-86.
	Left service, May, 1886.	
Swift, W. H. (from Boston, U. S.).....	Consulting Engineer, Caughnawaga Canal, recommends route proposed by J. B. Mills, 19th February, 1848.....	6th June, 1855.
Symmes, H. R.....	Superintending Engineer, River St. Maurice, slides and booms, &c.....	24th Feb., 1858, to 8th Oct., 1875.
	Died 8th October, 1875.	
Taché, Joseph Charles	Engineering Staff at Headquarters.....	29th Jan., 1872.
	Chief Draughtsman.....	1st July, 1883.
	Harbour works, &c., below Quebec, surveys and construction.....	1882 to 1888.
Tait, Charles Maitland	Employed on survey of Beauharnois Canal.....	1842.
Tait, T. M.....	Engineer of harbour works, Montreal.....	1845 to 1848.
Telford, Thomas.....	Report on projected Baie Verte Canal between Bay of Fundy and Gulf of St. Lawrence.....	1826.
Thom, G., Brevet Brigadier General, U. S. A.	Report on sawdust obstruction in navigable rivers.....	27th Aug., 1872.
Thompson, David.....	Astronomer and Surveyor, engaged in surveying and defining boundary line, for Great Britain, between Canada and the United States.....	1816 to 1827.
	On the River St. Lawrence.....	1817.
	Survey of Lake of the Woods.....	1825.
	Survey of Lake St. Francis, &c.....	1832-34.
	Survey of canal route, Lake Huron to Ottawa River.....	1837.
	Survey of Lake St. Peter Channel and estimate of proposed dredging for ship channel.....	1841.
Thompson, E. W.....	Assistant Engineer, Carillon Canal, new locks and dam....	July, 1872.
Thompson, H. B.....	Lachine Canal Enlargement.....	Dec., 1872.
	Assistant Resident Engineer, Oulbate Canal, Upper Ottawa	Sept., 1873.
Thompson, H. G.....	Reports on surveys and maps, with soundings of River St. Lawrence above Lake St. Louis.....	Sept & Dec, 1836-42

ENGINEERS employed on Public Works, Canada—*Continued.*

Engineers.	Works.	Dates of Employment.
Thompson, W. G. McNeill, M. Inst., C. E.	Resident Engineer, Southern Division, Welland Canal Enlargement Entered the service of the Dominion Government in April, 1868, as Division Engineer on surveys and location of the Intercolonial Railway, and served in Nova Scotia, New Brunswick and Quebec Provinces until the spring of 1872. In charge of the survey of Lake St. Louis. Adolphe Larue, P.L.S., surveyed Lake St. Louis, 1836.	1872-88. Spring, 1872.
Tibbett, Hiram.....	Description of a projected route for the Welland Canal.....	1823.
Tomlinson, Joseph	Engineering Staff, Public Works, Canada. Superintending Engineer, lighthouses, Canada.....	1st Jan., 1870. 5th May, 1871-80.
Townsend, T. B.	Inspector of bridges on railways, &c Engineering Staff of Chief Engineer, Public Works, Ottawa	9th Feb., 1880-88. Sept., 1872-80.
Tremblay, A. J.	Contractor for lock gates, Welland Canal Enlargement....	17th July, 1880.
Trudeau, André.....	Engineering Staff, harbour surveys below Quebec..... Survey with Alex Stevenson in connection with improvements of water communication between Lakes St. Francis and St. Louis.....	1888. 1830-31.
Trudeau, Louis E.	Engineering Staff, harbour surveys, &c. do canals, &c., Province of Quebec.....	July, 1875-80. 1880-88.
Trudeau, Toussaint....	Appointed Secretary of Public Works, Ontario and Quebec Chief Engineer, Public Works	13th Dec., 1859-64. 8th March, 1864.
Trutch, Hon. J. W., O. M. G.....	Assistant Commissioner, Public Works, Ontario and Quebec Deputy Minister Public Works, Canada..... do Railways and Canals, Canada.....	15th do 1864. May, 1868-79. 22nd Sept., 1879-88
Tully, Kivas.....	In charge of Public Works, British Columbia..... Previously Lieut.-Governor of British Columbia.	1881 to Jan., 1888.
Valiquette, N.....	Engineer, Toronto Harbour Commissioners. Proposed Georgian Bay Canal, Lake Ontario to Lake Huron	1853-88. 1845-51.
Vaughan, Captain.....	Engineering Staff, Public Works, Ottawa..... Superintendent of dredging, new straight channel, Lake St. Peter.....	May, 1880-88. 1844-46. 1855-61.
Walton, D. S.....	In charge of Lighthouse at Belle-Ile..... Died at Quebec, 9th Dec., 1869.	9th Dec., 1869.
Walter, J. L.	Engineering Staff, Lachine Canal Enlargement, St. Ours Lock and dam, Chambly Canal, roads, bridges, &c., Hull to Grenville, Bytown to l'Original, &c	1843-49. July 1882-88.
Wells, Alexander W...	Engineering Staff, New Trent Canals. do Cornwall Canal Enlargement, lower half	Aug., 1883.
Wells, Arthur.....	Engineering Staff Survey, proposed Dawson Route from Fort William on the River Kaministiquia, Thunder Bay, Lake Superior, to Fort Garry or Winnipeg, Manitoba .	1857 to 1859.
West, James.....	Engineering Staff, Public Works, Ontario and Quebec, roads, Eastern Townships, and Lachine Canal En- largement, &c	1846.
Westmacott, Lieut. S., R. E.....	Specification, bridge across westerly channel of the River Rideau, near its mouth	5th July, 1845. 23rd Feb., 1856.
White, Lieut. H. A., R. E.....	Proposed Georgian Bay, Lake Huron and Ottawa Canal.... Report on causes of floods at Montreal.....	19th June, 1841.
Williams, J. B.....	Report on experiment made as Quebec to destroy Sally Port gates with gunpowder.....	1th July, 1840-
Wise, Frederick Ash- ford Milbank.....	Engineering Staff, Public Works, River Saskatchewan Im- provement, &c., N.W.T..... Engineering Staff, Survey of route for proposed Saut Ste. Marie Canal, under S. Keefer, Chief Engineer of Public Works, Canada	1885-87. 1852.

ENGINEERS employed on Public Works, Canada—*Concluded.*

Engineers.	Works.	Dates of Employment.
	Engineering Staff, Public Works surveys, harbours, Ontario	1860-61.
	Superintending Engineer, Rideau Canal, Ottawa to River Gananoque, near Kingston, Ontario.....	1st Oct., 1872-88.
	Report on Tay Canal survey. Old Canal opened 1834, from town of Perth to Rideau Canal.	
Wolfe, Major Alex. Jos.	Superintending Engineer, Kempt Road, from St. Octave de Métis, near the River St. Lawrence, to Cross Point, Baie des Chaleurs	1830-32.
Wright, Benjamin.	Projected Welland Canal Enlargement	1833.
	do Williamsburgh Canals	1833.
Wright, G. B.	Consulting Engineer, Cornwall Canal	1833.
	Fraser River Improvements, British Columbia, report.....	1876-80.
Yule, Capt. P., R.E....	Plans, Canal and lock proposed at Ste. Anne, south side River Ottawa, instead of old lock, built 1816, in Vaudreuil channel between Ile Perrot and Vaudreuil, of wood	1835.
	New stone lock, north side of river, 190 by 45 feet, with 6 feet water on sills, built 1840-43.	
	Enlarged stone lock 200 X 45 with 9 feet water on sills and a new channel with crib work and embankment on each side, in the river below the lock, commenced in 1873 and completed towards 1883.	

N.B.—See remarks on title page respecting Canal Superintendents and the most important works on which Engineers have reported.—G. F. B.

DOMINION OF CANADA.

ANNUAL REPORT

OF THE

MINISTER OF RAILWAYS AND CANALS

FOR THE PAST

FISCAL YEAR FROM 1ST JULY, 1887, TO 30TH JUNE, 1888,

ON THE WORKS UNDER HIS CONTROL.

SUBMITTED IN ACCORDANCE WITH THE PROVISIONS OF THE REVISED STATUTES
OF CANADA, CHAPTER 37, SECTION 28.

PRINTED BY ORDER OF THE HOUSE OF COMMONS.



OTTAWA :
PRINTED FOR THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY.

A. SENECAI, SUPERINTENDENT OF PRINTING.

1889.

CONTENTS OF REPORT.

RAILWAYS.

GENERAL STATEMENT.

CANADIAN PACIFIC RAILWAY :

	PAGE.
Distances—Trunk line.....	x
Agreement and arbitration.....	x

GOVERNMENT RAILWAYS :

Length of lines	xi
General financial position.....	xii

INTERCOLONIAL :

Table of Distances.....	xii
Expenditure on Capital Account.....	xiii
do Revenue do	xiv
Gross Earnings and Working Expenses of the year.....	xiv
Comparative Traffic Statistics.....	xiv
General items.....	xv
Windsor Branch.....	xvi
Eastern Extension Railway.....	xvii
Oxford and New Glasgow Division.....	xvii
Cape Breton Division.....	xviii
Pictou Town Branch.....	xviii

PRINCE EDWARD ISLAND RAILWAY :

Distances on Line and Extensions.....	xviii
Expenditure on Capital and Revenue Account.....	xix
Gross Earnings and Expenditure of the year.....	xix
Comparative Traffic Statistics.....	xix
Carleton Branch.....	xx

SUBSIDIZED LINES :

Lines for which Parliament authorized Subsidies in 1882.....	xx
do do 1883.....	xxi
do do 1884.....	xxiv
do do 1885.....	xxvii
do do 1886.....	xxxi
do do 1887.....	xxxv
do do 1888.....	xl

LAND SUBSIDIES.....	xliii
---------------------	-------

GOVERNMENT ACTION AS TO SUBSIDIZED LINES.

General Statement.....	xli
Alberta Southern Railway Company.....	xli
Alberta and Athabaska Railway Company.....	lxxi
Atlantic and North-West Railway Company.....	xlvii
Baie des Chaleurs Railway Company.....	xliv
Beauharnois Junction Railway Company.....	1
Belleville and North Hastings Railway Company.....	1
Brantford, Waterloo and Lake Erie Railway Company.....	1
Brockville, Westport and Sault Ste. Marie Railway Company.....	1
Buctouche and Moncton Railway Company.....	1
Canada Atlantic Railway Company.....	li
Caraquet Railway Company.....	lii
Central Railway Company of New Brunswick.....	liii
Chignecto Marine Transport Railway Company.....	liii

Page.

Cornwallis Valley Railway Company.....	liv
Cumberland Railway Company.....	liv
Dominion Lime Company.....	liv
Drummond County Railway Company.....	lv
Elgin, Petricodiac and Havelock Railway Company.....	lv
Fredericton and St. Mary's Bridge Company.....	lv
Great Eastern Railway Company.....	lvi
Great Northern Railway Company.....	lvi
Great North-West Central Railway Company.....	lxxii
Guelf Junction Railway Company.....	lvii
Harvey Branch Railway Company.....	lvii
Hereford Branch Railway Company.....	lvii
International Railway Company.....	lvii
Iroindale, Bancroft and Ottawa Railway Company.....	lviii
Joggins Railway Company.....	lviii
Lake Erie, Essex and Detroit River Railway Company.....	lviii
Lake Temiscamingue Colonization Railway Company.....	lix
Leamington and St. Clair Railway Company.....	lix
Manitoba and North-Western Railway Company.....	lxxii
Manitoba South-Western Colonization Railway Company.....	lxxiii
Minudie Railway Company.....	lx
Montreal and Champlain Junction Railway Company.....	lx
Montreal and Lake Maskinonge Railway Company.....	lx
Montreal and Sorel Railway Company.....	lx
Medicine Hat Railway and Coal Company.....	lxxv
New Brunswick and Prince Edward Railway Company.....	lxi
Napanee, Tamworth and Quebec Railway Company.....	lxi
Northern and Pacific Junction Railway Company—Gravenhurst to Callander.....	lxii
Northern and Western Railway Company.....	lxii
North-Western Coal and Navigation Company.....	lxxv
Nova Scotia Central Railway Company.....	lxiii
Ontario and Pacific Railway Company.....	lxiv
Ottawa and Gatineau Valley Railway Company.....	lxiv
Pontiac Pacific Junction Railway Company.....	lxv
Quebec Central Railway Company.....	lxv
Quebec and Lake St. John Railway Company.....	lxvi
Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Company.....	lxxv
"Short Line".....	lxvii
South Norfolk Railway Company.....	lxvii
St. Catharines and Niagara Central Railway Company.....	lxvii
St. John Valley and Rivière du Loup Railway Company.....	lxviii
St. Lawrence, Lower Laurentian and Saguenay Railway Company.....	lxviii
Stewiacke Valley and Lansdowne Railway Company.....	lxviii
Temiscouata Railway Company.....	lxix
Tobique Valley Railway Company.....	lxix
Toronto, Grey and Bruce Railway Company.....	lxix
Western Counties Railway Company.....	lxx
West Ontario Pacific Railway Company.....	lxxi
Winnipeg and Hudson's Bay Railway and Steamship Company.....	lxxvi
Wood Mountain and Qu'Appelle Railway Company.....	lxxvii
NORTHUMBERLAND STRAITS TUNNEL SURVEY.....	lxxvii
ST. CLAIR RIVER TUNNEL.....	lxxviii
ROYAL COMMISSION ON RAILWAYS.....	lxxviii

CANALS.

List of Canal Systems.....	lxxix
Revenue accrued from.....	lxxix
RIVER ST. LAWRENCE AND LAKES :	
General information.....	lxxix
LACHINE CANAL.....	lxxxii
BEAUHARNOIS CANAL.....	lxxxiii
CORNWALL CANAL.....	lxxxiii
WILLIAMSBURGH CANALS :	
Farran's Point Canal.....	lxxxv
Rapide Plat Canal.....	lxxxv
Galops Canal.....	lxxxv
do Rapid, Improvement of Channel.....	lxxxv
WELLAND CANAL :	
Main Line, Lake Ontario to Lake Erie.....	lxxxvii
Welland River Branches.....	lxxxvii
Grand River Feeder.....	lxxxvii
Port Maitland Branch.....	lxxxvii

	Page.
MONTREAL, OTTAWA AND KINGSTON:	
General description.....	lxxxviii
Table of Distances.....	lxxxviii
St. Anne's Lock.....	lxxxix
Carillon Canal.....	lxxxix
Grenville Canal.....	xc
UPPER OTTAWA RIVER:	
Culbute Locks and Dam.....	xc
RIDEAU CANAL.....	xcii
TAY CANAL:	
Works of Construction.....	xcii
RICHELIEU AND LAKE CHAMPLAIN:	
General description.....	xciii
St. Ours' Lock and Dam.....	xciii
Chambly Canal.....	xciii
RIVER RICHELIEU SURVEY.....	xciv
St. PETER'S CANAL.....	xcv
TRENT RIVER NAVIGATION:	
Description.....	xcv
Extent of Navigable and Unnavigable Reaches.....	xcvi
New works.....	xcvii
MURRAY CANAL.....	xcvii
SAULT STE. MARIE CANAL.....	xcix
ROYAL COMMISSION ON LACHINE CANAL LEASES.....	xcix
COMMISSION ON THE TRENT NAVIGATION.....	c

MAPS.

(BETWEEN REPORT AND APPENDICES.)

1. General map of the Dominion.
2. Nova Scotia, Cape Breton, Prince Edward Island and part of New Brunswick.
3. New Brunswick and parts of Maine and Quebec.
4. do do taking in Montreal.
5. Eastern Ontario and part of Quebec.
6. Western Ontario.
7. Manitoba and Assiniboia.

DIAGRAM.

Dominion Canals.

APPENDICES.

	PAGE
Statement of Expenditure during fiscal year.....	1
Total expenditure on Canal Construction and Enlargement.....	2
Statement of Payments made on account of Subsidies voted to Railways	6
Report on Canadian Pacific Railway, by Collingwood Schreiber, Chief Engineer	9
Oxford, New Glasgow and Cape Breton Division of Government Railways.....	11
General Report on Government Railways in operation, by Collingwood Schreiber, Chief Engineer and General Manager of Government Railways	16
Intercolonial Railway.....	16
Eastern Extension.....	20
Windsor Branch Railway.....	20
Prince Edward Island Railway.....	21
 REPORTS OF SUPERINTENDENTS, &c :—	
GOVERNMENT RAILWAYS.	
<i>Intercolonial Railway—</i>	
Report by D. Pottinger, Chief Superintendent.....	23
do T. Williams, Chief Accountant	29
do P. S. Archibald, Chief Engineer	38
do H. A. Whitney, Mechanical Superintendent	45
Return of Accidents and Casualties	52
<i>Eastern Extension Railway—</i>	
Report of D. Pottinger, Chief Superintendent	64
do T. Williams, Chief Accountant and Treasurer	66
do H. A. Whitney, Mechanical Superintendent.....	72
do P. S. Archibald, Chief Engineer	71
Return of Accidents and Casualties.....	73
<i>Windsor Branch Railway—</i>	
Report by D. Pottinger, Superintendent.....	74
do R. B. Boggs, Accountant.....	75
do P. S. Archibald, Engineer	78
<i>Prince Edward Island Railway—</i>	
Report by J. Unsworth, Superintendent	80
do W. T. Huggan, Accountant.....	85
do J. Unsworth, Mechanical Superintendent	91
Return of Accidents and Casualties.....	99
CANALS.	
LACHINE CANAL	100
Beaubarnois Canal.....	102
Chambly "	104
St. Ours "	109
by E. H. Parent, Superintending Engineer.	
Richelieu River, by L. G. Papineau.....	115
Statement of fines, damages, &c, collected on above Canals	110
Statement of depth of river on the sills at the entrance of the Lachine, Beau- barnois and Chambly Canals	112
OTTAWA RIVER CANALS—Construction—Maintenance.....	116
St. Anne's, Grenville, Carillon and Culbute.....	116
by B. Starke, Superintending Engineer.	

	PAGE.
CORNWALL CANAL	118
by D. A. McDonnell, Superintendent.	
WILLIAMSBURG CANALS	119
by A. G. Macdonnell, Superintendent.	
Statement showing depth of water on the sills of the Williamsburg Canals....	120
WELLAND CANAL (New)	122
do (Old).....	129
Feeder, Junction to Dunnville and Port Maitland.....	135
by Wm. Ellis, Superintendent.	
Statement showing depth of water on sills at Port Dalhousie and Port Colborne	136
by Wm. Ellis, Superintendent.	
RIDEAU CANAL	139
by F. A. Wise, Superintending Engineer.	
TAY CANAL	142
by F. A. Wise, Superintending Engineer.	
TRENT CANAL WORKS	143
by Richard B. Rogers, Superintending Engineer.	
TRENT RIVER NAVIGATION	146
by D. Starke, Superintending Engineer.	
ST. PETER'S CANAL	148
by Henry F. Perley, Engineer-in-charge.	
St. Lawrence navigation, table of distances	149
Table of distances of stations between Ottawa and Kingston	150
Table showing date of the closing of the Canals in 1887, and of their opening in 1888	151
Statement of contracts entered into between 1st July, 1887, and 30th June, 1888	152
General statement, showing:—	
1st. Water power and other public property, leased on Canals and Railways during the fiscal year ended 30th June, 1888.....	160
2nd. Property purchased and property sold by the Department during the fiscal year ended 30th June, 1888.....	164
3rd. List of agreements respecting Subsidies.....	180
Alphabetical list of Railways for which Subsidies have been voted by Parliament	184
Votes granted under Subsidy Acts cancelled or amended by subsequent Acts of Parliament	190

REPORT

1887-88.

*To His Excellency Lord Stanley of Preston,
Governor General of Canada, &c., &c., &c.*

MAY IT PLEASE YOUR EXCELLENCY :

I have the honour to submit the Annual Report of the Department of Railways and Canals for the fiscal year ended 30th June, 1888.

This report is submitted in accordance with the provisions of the Revised Statutes of Canada, 1886, Cap. 37, Section 28.

The Annual Reports of the Chief Engineers, together with general and special Reports from Superintendents, both of Railways and Canals, and from other Officers of the Department are given in Appendices.

Attached hereto (Appendices Nos. 1, 2 and 3) will be found statements showing the amounts expended during the past fiscal year in construction, repairs and maintenance of the several works under the Department.

RAILWAYS.

The present Report deals with those Railways of the Dominion directly controlled by the Federal Government, and others towards the construction of which subsidies have been authorized.*

There is prepared by this Department, and laid before Parliament annually, a special Statistical Report embodying returns made by Canadian railway companies, as required by statute. These returns give information as to railroad operations in Canada.

The following general facts gathered from this compilation, relating to roads other than Government railways, being returns made for the fiscal year ended on the 30th of June, 1887, the last issued, will be of interest.

The year appears to be marked by much activity in railway construction, while the receipts of those railways already built evidence a degree of prosperity exceeding anything yet reached in Canada. Thirteen new lines are added to the list of Canadian railways, making a total of 64 railway companies, while others under

* It should be observed that while the usual reports furnished by the Superintending officers, and to be found in the appendices hereto, deal with the fiscal year only, the General Report of the Minister contains information on points of interest relating to subsidized lines of railway up to the end of December, 1888.

construction in the previous year, are now wholly or partly in operation. The use of steel in place of iron rails has become almost universal, and the equipment of the several roads has been largely increased. There were at the close of the year 12,332 miles of completed railway (exclusive of the Government railways) of which 11,157 miles were laid with steel rails. The capital paid,—including Government bonuses, \$129,810,633, loans \$20,592,026, and subscriptions to shares \$300,000, and aid given by municipalities \$12,812,836,—amounted to \$633,773,191.33 The gross earnings amounted to \$38,842,010, an increase of nearly \$5,500,000, the working expenses being \$27,624,683, leaving the net earnings of the year \$11,217,327. The number of passengers carried was 10,698,638 and the freight transported over these roads amounted to 16,356,335 tons. The miles run by trains were 33,638,748. The total number of passengers killed was 10, death in all cases being due to their own carelessness.

CANADIAN PACIFIC RAILWAY.

TRUNK LINE.

		Miles.
	Quebec to St. Martin's Junction (13 miles north of Montreal).....	159
	Montreal (at the head of Atlantic Ocean Navigation) to St. Martin's Junction.....	13
	St. Martin's Junction to Callander.....	331
For this portion the Company were subsidized direct by the Government under their contract.	Callander to Port Arthur.....	649
	Port Arthur to Red River (opposite Winnipeg)....	428
	Red River to Savona's Ferry.....	1,257
	Savona's Ferry to the waters of the Pacific Ocean at Port Moody.....	213
		2,547
	Port Moody to Vancouver on Burrard Inlet.....	15
	Total, Montreal to Vancouver, Burrard Inlet.....	2,906

This road, so far as the Dominion is concerned, being completed by and handed over to the company, as is recorded in the last annual report of this Department, but little remains to be dealt with in the present report as occurring within the past fiscal year.

By the Act 51 Vic, c. 32, approval and ratification were given to a certain agreement dated the 18th of April, 1888, provisionally made between the Government and the company, whereby the restrictions contained in article fifteen of the original agreement for the construction of the road, barring the Dominion Parliament for 20 years from authorizing the construction of railways south of the Canadian Pacific Railway from any point at or near that road except those running south-west, were removed. By this agreement the Government undertook to guarantee the payment of interest at 3½ per cent. on an issue of the company's bonds to the extent of fifteen million dollars, running for a term not exceeding [1888]

ERRATUM.

On fourth line of page x, for "exclusive of government railways," read "inclusive of government railways," (the statistics which follow covering the government roads as well as those of private companies).

fifty years; the unsold lands of the company's subsidy, estimated at nearly 15 million acres, to form the security for such bonds. The arrangements contemplated by this agreement are being carried out by the Department of Finance. A deed of mortgage in favour of special trustees, one of whom is the Minister of Finance, has been executed under date the 2nd of June 1888, having previously been approved by an Order in Council of the 1st of that month, being a mortgage of the said unsold lands of the company's subsidy, amounting to 14,934,238 acres, constituting the said security.

In the agreement dated the 20th of November, 1886, and executed under an Order in Council of the 2nd of that month, which constituted the basis of the final settlement of matters between the Government and the company prior to the transfer of the road to them, a special provision was inserted in view of dispute as to the condition in which the work in British Columbia executed by the Government should be handed over, the company accepting the same "subject to the adjustment and correction by the Government of any defects or deficiencies in the construction thereof, if any, according to the specifications and conditions of the contracts therefor, except in so far as the same were modified by the Government prior to October twenty-first, 1880." *

For the determination of the questions covered by the foregoing, a special arbitration was authorized by an Order in Council of the 5th of January, 1888, and the arbitrators, subsequently appointed, have held sittings at Vancouver and Ottawa, examining the line and hearing evidence on both sides. They have not yet presented their award.

GOVERNMENT RAILWAYS IN OPERATION.

The several lines operated and maintained by the Government during the past fiscal year, ended the 30th June, 1888, were:—

	Miles.
The Intercolonial and its extensions.....	834
Eastern Extension Railway.....	80
Windsor Branch (maintained only).....	32
Prince Edward Island	211
	<hr/>
Total mileage.....	1,217
	<hr/> <hr/>

Details respecting these railways and their operations will be found in Appendices Nos. 5 to 7, p. 11, from the Chief Engineer and General Manager, and in the following appendices from the Chief Superintendent and other officials of the road.

The through ocean mail line from Point Lévis, opposite Quebec, to Halifax, is 688 miles in length.

The length of roads operated was increased by the completion of the Picton Town Branch of the Intercolonial, fourteen miles in length.

The General Revenue Accounts for 1887-88 show the following as the financial position of these roads for the past fiscal year. The average length of road

* The date of the company's contract.

operated for the whole fiscal year was 1,210 miles, the Pictou Town Branch not having been opened until the 28th of November, 1887 :—

—	Average mileage of the year	Expenditure.	Earnings.	Profit.	Loss.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Intercolonial.	886	3,276,441 61	2,912,783 85	.....	363,657 76
Eastern Extension.....	80.	90,954 73	70,552 20	.....	20,402 53
Windsor Branch (earnings, one-third of entire receipts).....	32	24,040 33	24,553 55	513 22	
Prince Edward Island.	211	229,639 95	158,363 62	.....	71,276 33
				513 22	455,336 62
					513 22
Total.....	1,210	.....	.....	.....	454,823 40

INTERCOLONIAL RAILWAY.

LENGTH OF LINE.

Ocean Mail Line.

	Miles.
Point Lévis to Rivière du Loup.....	126
Rivière du Loup to Moncton....	374
Moncton to Painsec.....	8
Painsec to Truro.....	118
Truro to Halifax	62
	688

Extensions.

Moncton to St. John.....	89
Painsec to Shediac.....	11
Truro to Pictou.....	52
Dalhousie Junction to Dalhousie.....	7
St. Charles Loop Line.....	14
Dartmouth Branch.....	5
Indiantown Branch.....	14
Pictou Town Branch.....	14
	206
	894

Wharf Branches.

	Miles.
Rimouski to Wharf.....	2
Newcastle, N. B., to Deep Water Wharf.....	2
Dorchester to Shipping Wharf.....	1
Sackville to Shipping Wharf.....	0.5
Stewiacke to Wharf.....	1
Rivière du Loup Town to Wharf.....	4
	<u>10.5</u>

Capital Account.

The expenditure charged to the capital account for the year ended 30th June, 1888, is as follows:—

The total cost of road and equipment on 30th June, 1887, was.....	\$44,995,982 42
Paid in the fiscal year 1886-87 to the New Brunswick Government in connection with the purchase of the railway between the Missiquash and Painsec Junction, but not entered on the I. C. R. books till the current year.....	149,441 40
	<u>\$45,145,423 82</u>
Less refunded.....	50 00
	<u>\$45,145,373 82</u>

The additions during the year are as follows:—

For Halifax Extension.....	\$ 8,992 97
Increased accommodation, St. John.....	2,513 89
Increased accommodation, Moncton.....	16,653 56
Increased accommodation, Rivière du Loup.....	3,997 51
Original construction of the Intercolonial Railway.....	10,004 12
Rolling stock.....	258,334 81
St. Charles Branch.....	106,045 18
Dartmouth Branch.....	3,442 28
Dalhousie Branch.....	1,343 00
Rivière du Loup Town Branch...	355 79
Indiantown Branch.....	9,940 45
Pictou Town Branch.....	227,924 54
Track to wharf at Sackville.....	1,398 20
Road crossing at Bathurst... ..	4,083 26
Coal shed at Amherst.....	567 50
Machinery.....	9,770 25

[1888]

Servis tie plates	12,571 50	
Snow sheds and snow fences.....	38,998 75	
Appliances for heating cars with steam and lighting them by electricity.....	21,617 54	
Expenses in connection with the Richmond siding, Halifax...	3,830 28	
		<u>742,385 38</u>
Making the total cost to 30th June, 1888...	\$15,867,769 20	<u><u> </u></u>

Revenue Account.

The gross expenditure for the year was.....	\$3,276,441 61
The earnings were.....	2,912,783 85
	<u> </u>
Excess of expenditure over earnings.....	\$ 363,657 76
	<u><u> </u></u>

	1887-88.	1886-87.
Earnings from passenger traffic.....	\$ 845,041 65	\$ 792,678 56
do freight do	1,909,842 04	1,657,695 76
do mails and sundries...	157,900 16	145,655 51
	<u> </u>	<u> </u>
	\$2,912,783 85	\$2,596,009 83
	<u><u> </u></u>	<u><u> </u></u>

The gross earnings, compared with those of the previous year show an increase of..... \$ 316,774 02

The value of stores in hand, including steel rails and fuel, at the end of the year 1887-88 was.. \$ 498,634 83

The engine mileage, compared with that of last year was:—

	Miles.
1887-88.....	5,936,035
1886-87.....	5,466,488
	<u> </u>
Increase.....	469,547
	<u><u> </u></u>

The car mileage, compared with that of last year, was:—

1887-88	56,008,930
1886-87	52,001,928
	<u> </u>
Increase.....	4,007,002
	<u><u> </u></u>

The train mileage, compared with that of last year, was:—

1887-88	4,939,253
1886-87	4,512,599
	<u> </u>
Increase.....	426,654
	<u><u> </u></u>

The working expenses per mile run by engines, were:—

	Cents.
1887-88	55·19
1886-87	51·74
Increase.....	<u>4·45</u>

The working expenses per mile run by trains, were:—

	Cents.
1887-88	60·33
1886-87	62·67
Increase.....	<u>3·66</u>

Working expenses per mile of railway:—

1887-88	\$3,723 23
1886-87	3,265 72
Increase.....	<u>\$ 457 51</u>

The gross tonnage carried was:—

	Tons.
1887-88	1,275,995
1886-87	1,131,334
Increase.....	<u>144,661</u>

The total number of passengers carried was:—

1887-88	996,194
1886-87	940,144
Increase.....	<u>56,050</u>

In comparison with last year's results, there was an increase of 56,050 in the number of passengers, and an increase of 144,661 in the number of tons of freight carried by the road. The earnings also show an increase of \$316,774.02. The expenditure for working shows an increase of \$448,326.03.

This expenditure, however, has included much that might very properly be charged to the capital account, and is shown in detail in the annexed reports of the Chief Engineer of the road and of the Mechanical Superintendent. The items include the erection of new buildings to replace others destroyed by fire, the erection of about 132 miles of wire fencing (the cost of maintenance of ordinary fencing for the year being nearly \$87,000); the purchase of four locomotives to replace that number out of use, together with the building of a considerable number of cars of various kinds, replacing others disused, besides considerable additions to the means of water supply, also ballasting and tie renewals. The direct cost of snow clearance was \$67,000, besides the cost of repairing snow ploughs, \$26,000.

The items of increase to the capital account of the road have already been given, explanatory notes with respect to them will be found in the annexed report

of the Chief Superintendent. The most considerable items are for new rolling stock (further provision of which was necessary mainly for the accommodation of the increase in the coal traffic and other freight), the construction of the Pictou Town Branch, and expenditure on the St. Charles Branch. These three items make up \$592,304.53 out of the total capital expenditure of the year, \$742,385.38.

The earnings of the road for the transport of freight, \$1,909,842.04, were 65.57 per cent. of the gross earnings, as against 63.86 per cent. the year before.

The increases in the freight traffic compared with the returns of the previous year, comprise flour, grain, lumber, live stock, fish and coal, in all of which a marked improvement is observable. The coal traffic from Nova Scotia to the upper Provinces shows a steady growth each year, having risen from 570 tons in 1879 to 192,022 tons in 1887. The rates charged for coal transport, however, are not directly remunerative to the road.

The adoption of steam from the locomotive for the purpose of heating passenger cars has been satisfactorily carried out, and the use of the apparatus is being extended.

The use of electricity as a means of lighting a certain number of cars has also been successfully adopted.

By the construction of the new Pictou Town Branch, between Stellarton and Pictou, the tedious delay and inconvenience of the ferry transport across the Pictou Harbour is avoided, and the traffic greatly advantaged.

Both the rolling stock and the road are in good order.

WINDSOR BRANCH.

The arrangement whereby the Windsor and Annapolis Railway Company operate this line still continues. The company pay all charges in connection with the working, two-thirds of the gross earnings being allowed them for such purpose; the Government taking the remaining one-third, and assuming all cost of maintenance.

All charges for superintendence and supervision of maintenance of works are borne by the Intercolonial Railway, whose chief officer performs the duty.

The earnings and expenditure for the year ended the 30th June, 1888, were as follows :—

Earnings accruing to the Government (one-third of the gross earnings).....	\$ 24,533 55
Expenditure for maintenance of way and works.....	24,020 33

Profit.....	\$ 513 22

Government earnings, in comparison with those of the previous year :—

1886-87	\$25,327 58
1887-88	24,533 55
Decrease.....	\$ 994 03

Expenditure in comparison with that of the previous year :—

1886-87	\$26,042 33
1887-88	24,020 33
Decrease.....	\$ 2,032 00

The line is in good order.

EASTERN EXTENSION RAILWAY.

This line of railway is eighty miles long, extending from the Pictou Branch of the Intercolonial Railway, at New Glasgow to Port Mulgrave on the Strait of Canso, thence connecting with Cape Breton by means of a ferry.

The line, with its equipment, was, on the 9th January, 1884, purchased by the Dominion Government from the Government of the Province of Nova Scotia, together with rights possessed by that Government in the Pictou Branch between Truro and Pictou; also, the ferry built for the passage of the Strait of Canso.

The road is worked by a staff directed by the chief officers of the Intercolonial.

The cost of the road and equipment amounted on the 30th June, 1888, to \$1,284,495.76, no addition having been made to capital account during the year.

The expenditure of the year amounted to.....	\$90,554 73
The gross earnings were.....	70,552 20
Loss.....	\$20,402 53

The earnings of the road, in comparison with those of the year 1836-87, show an increase of \$6,445.10.

The expenditure during the past fiscal year in comparison with that of the previous year shows a reduction of \$3,699.31.

The road and rolling stock are in good order.

OXFORD AND NEW GLASGOW DIVISION.

Under authority of a vote of Parliament, passed in 1882, there is being constructed a line of railway forming a comparatively straight road between two points on the Intercolonial system, namely, the Oxford station of that railway and Brown's Point on its Pictou Town Branch, the length being 67.60 miles. In addition a branch from it 4.75 miles long is being built, namely from Pugwash Junction to Pugwash Harbour, making a total of 72.35 miles. The line will pass close to the towns of Oxford, Pugwash, Wallace, Tatamagouche and River John. A recent inspection made shows satisfactory progress, with promise of early completion. A special provision of rolling stock has been made for this Division.

CAPE BRETON DIVISION

Under authorization of Parliament given by the Act 49 Vic., ch. 14, (1886) a line of railway is in course of construction by the Government in the Island of Cape Breton, extending from Point Tupper on the Strait of Canso (opposite the terminus of the Eastern Extension Railway at Port Mulgrave on the mainland) for a distance of 78 miles, to a point near Leatche's Creek, from which two extensions branch, one, 5 miles long, running to North Sydney, and the other, 13.75 miles long, into the town of Sydney, with a connecting line 1.25 miles long, giving communication with the International Coal Company's Railway beyond North Sydney, and thus bringing that important industry into direct line with the Intercolonial Railway system. The same advantage is afforded to the coal mines of Sydney. The total to be constructed is 98 miles. A report made by the Chief Engineer of Government Railways on the works will be found in the appendices hereto attached, and it will be observed that in his opinion there is good prospect of the completion of the whole of the works in readiness for traffic next autumn. The road will be placed in communication with the Intercolonial Railway (Eastern Extension) by means of a ferry between Point Tupper and Port Mulgrave.

It should be observed that the exceptionally wet character of the season has greatly embarrassed and retarded the work of railway construction on both the Oxford and New Glasgow and the Cape Breton Branch.

PICTOU TOWN BRANCH.

In the Session of 1886, Parliament voted an appropriation towards the construction of a branch of the Intercolonial Railway, from a point at or near Stellarton to the town of Pictou. Contracts were entered into on the 22nd of December, 1886, for the work, and the road, 14 miles long, was opened for traffic on the 28th of November, 1887.

PRINCE EDWARD ISLAND RAILWAY.

LENGTH OF LINE.

	Miles.
Tignish to Royalty Junction	113½
Royalty Junction to Mount Stewart.....	20
Mount Stewart to Georgetown.....	21
	— 154½

EXTENSIONS.

	Miles.
Cape Traverse Branch, County Line Station to Cape Traverse	2
Royalty Junction to Charlottetown... ..	5
Mount Stewart to Souris.....	39
	— 57
	— 210½

Capital Account.

No addition having been made to the expenditure on capital account during the past fiscal year, the total cost of the road and equipment chargeable to capital account at the close of the fiscal year 1887-88, remains the same as at the close of 1886-87, namely.....\$3,741,780 89

Revenue Account.

The working expenses and receipts for the year ended 30th of June, 1888, were :—

Gross expenses.....	\$ 229,639 95
Gross earnings.....	158,363 62
Excess of expenditure over earnings.....	\$ 71,276 33

The gross earnings, compared with those of the previous year, were :—

1887-88.....	\$ 158,363 62
1886-87.....	155,303 37
Increase.....	\$ 3,060 25

The gross expenditure, compared with that of the previous year, was :—

1887-88.....	\$ 229,639 95
1886-87.....	\$ 204,237 45
Increase.....	\$ 25,402 50

The engine mileage was :—

	Miles.
1886-87.....	316,763
1887-88.....	306,924
Decrease.....	9,839

The train mileage was :—

1886-87.....	258,457
1887-88.....	248,410
Decrease.....	10,047

The car mileage was :—

1887-88.....	1,309,922
1886-87.....	1,249,892
Increase.....	60,030

The value of the stores on hand on the 30th June, 1888, was \$114,743.29.

The road and its equipments are in good condition.

Communication between the Prince Edward Island Railway and the Intercolonial is afforded by a branch which leaves the island railway at Emerald (formerly called County Line) station and runs to Cape Traverse, a distance of thirteen miles. Last year the train service was made daily in place of bi-weekly as formerly. Across the strait to Cape Tormentine, on the mainland, the distance is nine miles. Here, by the line of the New Brunswick and Prince Edward Island Railway Company, about forty miles in length, connection is made with the Intercolonial Railway at Sackville. In winter time the ice-boats land at Cape Traverse. This ice boat service is conducted by the Marine Department, the mails being taken to and met at Cape Traverse by special trains.

CARLETON BRANCH RAILWAY.

In the year 1885 Parliament voted the sum of \$35,000 to purchase the Carleton Branch Railway, with harbour frontage, wharf and town lots and all other property of the company owning the road, "the Carleton, City of St. John Branch Railroad Company," the said road extending from Fairville, where it joins the line of the New Brunswick Railway Company, to Carleton on the south side of the River St. John, N.B., a distance of $3\frac{6}{10}$ miles. In the following year, an Act, 49 Vic., chap. 16, was passed, reciting that 4,700 out of the 5,000 shares of the company's capital stock had been purchased by the Government; declaring the work to be one for the general advantage of Canada, and authorizing the issue of a proclamation either with or without the purchase of the outstanding shares, vesting the road in the Crown.

By October, 1887, the whole of the remaining shares were acquired, with the exception of 33, the value of which is \$552, and a proclamation was issued on the 5th October, 1887, under the authority of an Order in Council of the same date declaring the road vested in the Crown from and after the 20th of that month. By an agreement dated the 1st of January, 1886, an interchange of running powers between the Intercolonial Railway and the New Brunswick Railway Company over the Carleton Branch Railway from Fairville to Carleton and the portion of the line of the company, namely, between Fairville and the St. John Cantilever Bridge, respectively, has been effected.

SUBSIDIZED LINES.

By the Acts of Parliament below specified, authority has been placed in the hands of the Governor in Council to grant, upon certain conditions, aid towards the construction of various lines of railway throughout the Dominion, as follows, namely:—

By the Act 45 Vic., cap. 14 (1882). (*Assented to 17th May, 1882*):—

1. For a railway from Gravenhurst to Callander, both in the Province of Ontario, a subsidy not exceeding \$6,000 per mile, nor exceeding in the whole..... \$660,000

(NOTE.—*Further subsidized by 46 Vic., ch. 25.*)

[1888]

2. For a Railway from St. Raymond to Lake St. John, both in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 384,000
 (NOTE.—Further subsidized by 46 Vic., ch. 25; 48-49 Vic., ch. 59; 49 Vic., ch. 10, and 50-51 Vic., ch. 24.)

3. For a railway from a point on the Intercolonial Railway at Rivière du Loup or Rivière Ouelle, in the Province of Quebec, or between them, to Edmundston, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 240,000
 (NOTE.—Further subsidized by 48-49 Vic., ch. 58.)

4. For a railway from Oxford to New Glasgow, both in the Province of Nova Scotia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 224,000
 (NOTE.—Further subsidized as part of a line to Sydney or Louisburg by 47 Vic., ch. 8.)

The said subsidies to be granted to such companies as shall be approved by the Governor in Council, as having established, to his satisfaction, their ability to complete the said railways respectively, within a reasonable time, to be fixed by Order in Council, and according to descriptions and specifications to be approved by the Governor in Council on the report of the Minister of Railways and Canals, and specified in an agreement to be made by the company with the Government, and which the Government is empowered to make, and to be payable out of the Consolidated Revenue Fund of Canada, by instalments on the completion of each ten miles of railway, proportionate to the value of the portion so completed in comparison with the whole work undertaken, such proportion to be established by the report of the said Minister, provided always, that the granting of such bonuses or subsidies, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights, as will afford all reasonable facilities and equal mileage rates to all railways connecting therewith, as the Governor in Council may determine.

By the special Act 45 Vic., cap. 55 (1882). (*Assented to 17th May, 1882*):—

5. A subsidy authorized in favour of "The Chignecto Marine Transport Railway Company," provided that they construct and thereafter maintain and operate a ship railway, to be approved by the Government, across the Isthmus of Chignecto from the Gulf of St. Lawrence to the Bay of Fundy, per year, for twenty-five years..... \$150,000
 (NOTE.—Amended by the special Act 49 Vic., ch. 18.)

By the Act 46 Vic., cap. 25 (1883). (*Assented to 25th May, 1883*):—

6. To the Baie des Chaleurs Railway Company, for 100 miles of their railway, from Matapedia, on the Intercolonial Railway, to Paspebiac, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole. 320,000
 (NOTE.—See also 49 Vic., ch. 17, as to additional vote.)

7. To the Caraquet Railway Company, for 36 miles of their railway from a point near Bathurst to Caraquet, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 115,200
 NOTE.—Further subsidized by 47 Vic., ch. 8; and 50—51 Vic., ch. 24.)
8. To the Gatineau Valley Railway Company, for the first 50 mile section of their railway, from Hull Station, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 160,000
 (NOTE.—Cancelled by 48-49 Vic., ch. 59.)
9. To the Great American and European Short Line Railway Company, for 80 miles of their railway from Canso to Louisburg or Sydney, in the Province of Nova Scotia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 256,000
 (NOTE.—This was amended by the Act 47 Vic., ch. 8, sec. 2, the words "To the Great American and European Short Line Railway Company" being struck out, and the word "the" being inserted for the word "their" and the words and figures "for 80 miles of" being omitted. The line was further subsidized by 47 Vic., ch. 8, as part of a line from Oxford Station to Sydney or Louisbourg; finally authorized as a Government work by Act 49 Vic., ch. 14.)
10. To the International Railway Company, for 49 miles of their railway from Sherbrooke, in the Province of Quebec, to the International boundary line, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 156,800
 In connection with the extension of this road through Maine to connect with New Brunswick, at or near Vanceborough or south of that point.
11. To the Northern and Western Railway Company, for 32 miles of their railway, from the Intercolonial Railway, near the Miramichi, to Moran's, near Demphy Village, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 102,400
 (NOTE.—Cancelled by 47 Vic., ch. 8.)
12. To the Montreal and Western Railway Company, for the first 50 mile section of their railway, out of St. Jérôme, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 160,000
 (NOTE.—Cancelled by 49 Vic., ch. 10.)
13. To the Napanee, Tamworth and Quebec Railway Company, for 28 miles of their railway, from Napanee to Tamworth, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, not exceeding in the whole..... 89,600

14. To the Quebec and Lake St. John Railway Company, for 25 miles of their railway, from St. Raymond to Lake St. John, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole. 80,000

In addition to the subsidy granted by the Act forty-fifth Victoria, chapter fourteen.

(NOTE.—Further subsidized by the Act 48-49 Vic., ch. 59; 49 Vic., ch. 10, and 50-51 Vic., ch. 24.)

15. For a railway from the Intercolonial Railway at Petitecodiac to Havelock Corner, in the Province of New Brunswick, 12 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 38,400

16. For a railway from Gravenhurst to Callander, 110 miles, a subsidy not exceeding \$6,000 per mile, nor exceeding in the whole..... 660,000

In addition to the subsidy granted by the Act forty-fifth Victoria, chapter fourteen.

“The nine subsidies first mentioned to be granted to the companies hereinbefore named respectively; and the two subsidies last mentioned to be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to complete the said railways, respectively; and all the eleven lines above mentioned, and also the lines of railway in respect of which it is provided by the Act forty-fifth Victoria, chapter fourteen, that subsidies may be granted, shall be commenced within two years from the first day of July next, and completed within a reasonable time, not to exceed four years from and after the passing of this Act, to be fixed by Order in Council, and according to descriptions and specifications to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made by each company with the Government, and which the Government is empowered to make; and all the said subsidies authorized by this Act, respectively, to be paid out of the Consolidated Revenue Fund of Canada by instalments, on the completion of each section of not less than ten miles of railway, proportionate to the value of the portion so completed in comparison with the whole work undertaken, to be established by the report of the said Minister: Provided always, that the granting of such subsidies shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized as the Governor in Council may determine.”

By the special Act 46 Vic., cap. 26 (1883). (Assented to 25th May, 1883):—

17. An advance authorized in favour of the “St. John Bridge and Railway Extension Company,” to enable them to build a railway bridge across the River St. John, N. B., with railway connection with the Intercolonial, such advance to be secured by a mortgage on their entire property, not to exceed 80 per cent. of the expenditure on the work, nor a total sum of\$ 500,000

By the Act 47 Vic., cap. 8 (1884). (*Assented to 19th April, 1884*):—

- 18.** To the Government of the Province of Quebec, in consideration of their having constructed the railway from Quebec to Ottawa, forming a connecting line between the Atlantic and Pacific coasts *via* the Intercolonial and Canadian Pacific Railway, and being as such a work of national and not merely provincial utility, a subsidy not exceeding \$6,000 per mile for the portion between Quebec and Montreal, 150 miles, nor exceeding in the whole..... 954,000
- 19.** And for the portion between Montreal and Ottawa, 120 miles, \$12,000 per mile, nor exceeding in the whole..... 1,440,000
- 20.** For the construction of a line of railway connecting Montreal with the harbours of St. John and Halifax by the shortest and best practicable route, after the report of competent engineers, a subsidy not exceeding \$170,000 per annum, for fifteen years, or a guarantee of a like sum for a like period as interest on bonds of the company undertaking the work, per year, for fifteen years..... 170,000
(NOTE.—*Further subsidized by the Act 48-49 Vic., ch. 58 sec. 1, sub-sec. 2.*)
- 21.** For the construction of a line of railway from Oxford Station, on the Intercolonial Railway, to Sydney or Louisburg, a subsidy not exceeding \$30,000 per annum for fifteen years, or a guarantee of a like sum for a like period as interest on the bonds of the company undertaking the work, in addition to the subsidies previously granted, and also a lease or transfer to such company of the Eastern Extension Railway, from New Glasgow to Canso, with its present equipment, per year, for 15 years. 30,000
(NOTE.—*Authorized as a Government work by 49 Vic., ch. 14.*)
- 22.** To the Quebec Central Railway Company, for a line of railway from Beauce Junction to the International boundary line, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 211,200
(NOTE.—*The unpaid balance cancelled and further subsidy granted by 51 Vic., ch. 3.*)
- 23.** For the extension of the Canadian Pacific Railway, from its terminus at St. Martin's Junction, near Montreal, or some other point on the Canadian Pacific Railway, to the harbour of Quebec, in such manner as may be approved by the Governor in Council, a subsidy not exceeding \$6,000 per mile, nor exceeding in the whole..... 960,000
(NOTE.—*Further subsidized by the Act 48-49 Vic., ch. 58, sec. 2. See also, below, subsidy for line between Jacques Cartier Junction and St. Martin's Junction, both subsidies being united by the Act last named.*)
- 24.** To the Irondale, Bancroft and Ottawa Railway Company, for a line of railway from the Victoria branch of the Midland Railway, to the village of Bancroft, in the township of Dungannon, county of Hastings, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 160,000

- 25.** To the Pontiac Pacific Junction Railway for a line of railway from Hull or Aylmer to Pembroke, provided the Ottawa river is crossed at some point not east of Lapasse, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 272,000
 (NOTE.—Further subsidized by 51 Vic., ch. 3.)
- 26.** To the Gatineau Railway Company, for a line of railway from Kazuabazua to Le Desert, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 160,000
 (NOTE.—Cancelled by Act 48-49 Vic, ch. 59.)
- 27.** To the Napanee, Tamworth and Quebec Railway Company, for a line of railway from Tamworth to Bogart and Bridgewater, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 70,400
 (NOTE.—Cancelled by Act 48-49 Vic., ch. 59.)
- 28.** To the Montreal and Western Railway Company, for a line of railway from the end of the line subsidized in the now last Session of Parliament, towards Le Desert, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 160,000
 (NOTE.—Cancelled by 49 Vic., ch. 10.)
- 29.** To the Northern and Western Railway Company, for a line of railway from Fredericton to the Miramichi River, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (instead of the subsidy proposed in 1883)..... 128,000
 (NOTE.—Further subsidized by 48-49 Vic., ch. 59, and by 49 Vic., ch. 10.)
- 30.** To the Erie and Huron Railway Company, for a line of railway from Wallaceburg to Sarnia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 96,000
- 31.** To the Ontario and Pacific Railway Company, for a line of railway from Cornwall to Perth, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 262,400
 (NOTE.—Further subsidized by 50-51 Vic., ch. 24.)
- 32.** To the Kingston and Pembroke Railway Company, for a line of railway from Mississippi to Renfrew, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 48,000
- 33.** To the Great Northern Railway Company, for that portion of their railway between St. Jérôme and New Glasgow, in the county of Terrebonne, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 32,000
- 34.** For a line of railway and bridge between the Jacques Cartier Union Railway Junction with the Canadian Pacific Railway and St. Martin's Junction, connecting the Jacques Cartier Union Railway with the North Shore Railway proper, a subsidy not exceeding in the whole..... 200,000
 (NOTE.—See Act 48-49 Vic., ch. 58, sec. 2.)

35. For a line of railway from Richibucto to St. Louis, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	22,400
36. For a line of railway from Hopewell to Alma, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	51,200
37. For a line of railway from St. Andrews to Lachute, in the county of Argenteuil, a subsidy not exceeding \$3,200 per mile nor exceeding in the whole.....	22,400
(NOTE.—Cancelled by 49 Vic., ch. 10.)	
38. For a line of railway from the Grand Piles, on the River St. Maurice, to Lake Edward, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	217,600
(NOTE.—Cancelled by 48-49 Vic., ch. 59.)	
39. For a line of railway from Annapolis to Digby, in the Province of Nova Scotia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000
(NOTE.—See arrangements authorized by Act 50-51 Vic., ch. 25.)	
40. For a line of the Central Railway, from the head of Grand Lake to the Intercolonial Railway, between Sussex and St. John, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	128,000
41. To the Caraquet Railway Company, for the extension of their line of railway from Caraquet to Shippegan Harbour, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	76,800
(NOTE.—In addition to subsidy granted by 46 Vic., ch. 25 ; further subsidized by 50-51 Vic., ch. 24.)	
42. For a branch of the Intercolonial Railway, from Matapedia eastward towards Pasbebiac, twenty miles, in the Province of Quebec, a sum not exceeding in the whole.....	300,000
43. For a branch of the Intercolonial Railway, from Derby Station to Indiantown, fourteen miles, a sum not exceeding in the whole.....	140,000

"The subsidies hereinbefore mentioned as to be granted to companies named for that purpose, shall be granted to such companies, respectively; the other subsidies shall be granted to such companies as shall be approved by the Governor in Council as having established, to his satisfaction, their ability to construct and complete the said railways, respectively. All the lines for the construction of which subsidies are granted shall be commenced within two years from the first day of July next and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, except the line mentioned in the fourth section of this Act,* which shall be commenced within one year, and shall also be constructed

* The extension of the Canadian Pacific Railway from its terminus at St. Martin's Junction, or some other point on the said railway, to the harbour at Quebec.

according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the Company with the Government, and which the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed, in comparison with that of the whole work undertaken, to be established by the report of the said Minister. The subsidies to the Province of Quebec shall be capitalized and the interest shall be payable at such time and in such manner as the Government of Canada shall agree upon with the Government of the said Province. The two subsidies last mentioned in the list are for works to be constructed by the Government of Canada.

“Provided always, that the granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights, as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized as the Governor in Council may determine.”

By the special Act 47 Vic., cap. 6 (1884). (Assented to 19th April, 1884):—

44. Relating to an agreement with the Province of British Columbia, authority was given *inter alia* for the grant of a subsidy to “the Esquimalt and Nanaimo Railway Company” in aid of the construction of a line of railway and telegraph between the points named; such subsidy to be in lands *en bloc* on Vancouver Island, the boundaries being fixed by the Act, and in money.....\$750,000

By the Act 48-49 Vic., cap. 59 (1885). (Assented to 20th July, 1885):—

- 45. To the Ottawa, Waddington and New York Railway and Bridge Company, for a line of railway from Ottawa to Waddington, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 166,400
- 46. To the New Brunswick and Prince Edward Railway Company, for a line of railway from Sackville to the Straits of Northumberland, at or near Cape Tormentine, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 118,400
- 47. To the Montreal and Sorel Railway Company, for a line of railway from St. Lambert to Sorel, a subsidy not exceeding \$1,600 per mile, nor exceeding in the whole..... 72,000
- 48. To the Brockville, Westport and Sault Ste. Marie Railway Company, for a line of railway from Brockville to Westport, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 128,000

49. To the Quebec and Lake St. John Railway Company, for a line of railway from its junction on the North Shore Railway to St. Raymond, upon condition of the Company extending their road to a point 50 miles north of St. Raymond, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 96,000

(NOTE.—*In addition to the subsidy granted by the Acts 45 Vic., ch. 14, and 46 Vic., ch. 25.*)

50. To the Northern and Western Railway Company, for a line of railway from the northern end of the 40 miles subsidized between Fredericton and the Miramichi River by 47 Victoria, chapter 8, to Boies-town, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole ... 19,200

51. To the Montreal and Champlain Junction Railway Company, for a line of railway from Brosseau's to Dundee, a subsidy not exceeding \$500 per mile, nor exceeding in the whole..... 30,000
(NOTE.—*Further subsidized by Act 50-51 Vic., ch. 24.*)

52. To the Thunder Bay Colonization Railway Company, for a line of railway from the Murillo station of the Canadian Pacific Railway to the east end of Whitefish Lake, a subsidy not exceeding \$3,200 per mile nor exceeding in the whole 92,000
(NOTE.—*Cancelled by 51 Vic., ch. 3.*)

53. To the Central Ontario Railway Company, for a line of railway from Coe Hill or Rathburn, to Bancroft, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 64,000

54. To the Belleville and North Hastings Railway Company, for a line of railway from the village of Madoc to the junction with the Central Ontario Railway at Eldorado, a subsidy not exceeding \$1,500 per mile, nor exceeding in the whole 10,500
(NOTE.—*Further subsidized by 49 Vic., ch. 10.*)

55. For a line of railway from Long Sault to the foot of Lake Temiscamingue, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 25,600
(NOTE.—*Further subsidized by 49 Vic., ch. 10, and the whole amended by the Act 50-51 Vic., ch. 24.*)

56. For a line of railway from a point on the Canada Southern Railway near Comber, to Lake Erie, at or near the village of Leamington, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 44,800
(NOTE.—*Further subsidized by the Act 50-51 Vic., ch. 24.*)

57. To the Napanee, Tamworth and Quebec Railway Company, for a line of railway from Tamworth towards Bogart and Bridgewater, 16 miles, in lieu of the subsidy granted by 47 Vic., chap. 8, a subsidy of..... 70,000
(NOTE.—*Cancelled by Act 49 Vic., ch. 10.*)

58. To the Gatineau Railway Company, for a line of railway from Hull station towards Le Desert, a distance of 62 miles, in lieu of the subsidies granted by 46 Vic., ch. 25, and 47 Vic., chapter 8, a subsidy of..... 320,000
 (NOTE.—*Substituted.*)
59. For a line of railway from the Grand Piles, on the River St. Maurice, to its junction with the Lake St. John Railway, a distance of about 50 miles, in lieu of the subsidy granted by 47 Victoria, chapter 8, for a line of railway from the Grand Piles, on the River St. Maurice, to Lake Edward, a subsidy of..... 217,600
 (NOTE.—*Cancelled by Act 50-51 Vic., ch. 24.*)
60. To the Canada Atlantic Railway Company, for a line of railway from Valleyfield to a point one and a-half mile west of Johnson's, a subsidy not exceeding \$1,600 per mile, and from one and a-half miles west of Johnston's to Lacolle; also from the present terminus at Ottawa to the Chaudière Falls, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 96,000
 (NOTE.—*Further subsidized by 49 Vic., ch. 10, and for their bridge over the St. Lawrence by 50-51 Vic., ch. 24.*)
61. For a line of railway from Indiantown *vid* the Miramichi Valley, to its junction with the Northern and Western Railway at or near Boies-town, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 140,800

“The subsidies hereinbefore mentioned as to be granted to companies named for that purpose, shall be granted to such companies, respectively; the other subsidies shall be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways, respectively. All the lines for the construction of which subsidies are granted shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council; and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the Company with the Government, and which the Government is hereby empowered to make; the location, also, of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies, respectively, shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister.”

“Provided always, that the granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running
 [1888]

powers or traffic arrangements and other rights, as will afford all reasonable facilities and equal mileage rates to all railways connected with those so subsidized, as the Governor in Council may determine."

By the Act 48-49 Vic., cap. 58 (1885). (*Assented to 20th July, 1885*) :—

62. For a railway from a point on the Intercolonial Railway at Rivière du Loup or Rivière Ouelle, in the Province of Quebec, to Edmundston, in the Province of New Brunswick, a subsidy not exceeding two thousand eight hundred dollars per mile for seventy-five miles, and six thousand dollars per mile for eight miles, nor exceeding in the whole two hundred and fifty-eight thousand dollars; the said subsidy to be in addition to the subsidy authorized to be granted in aid of the construction of the said railway by the Act forty-fifth Victoria, chapter fourteen, and constituting, with the subsidy so authorized, a subsidy not exceeding in the whole four hundred and ninety-eight thousand dollars, and to be granted for the said railway upon the terms and conditions specified in the said Act, and payable out of the Consolidated Revenue Fund of Canada; and for the purpose of incorporating the persons undertaking the construction of the said railway and those who shall be associated with them in the undertaking, the Governor may grant to them under such corporate name as he shall deem expedient, a charter conferring upon them the franchises, privileges and powers requisite for the said purposes, which shall be similar to such of the franchises, privileges and powers granted to railway companies during the present Session as the Governor shall deem most useful or appropriate to the said undertaking; and such charter being published in the *Canada Gazette*, with any Order or Orders in Council relating to it, shall have force and effect as if it were an Act of the Parliament of Canada" (*additional*)..... \$258,000

63. For a line of railway from the south bank of the St. Lawrence River, opposite or near Montreal, to the harbours of St. Andrews, St. John and Halifax, *via* Sherbrooke, Moosehead Lake, Mattawamkeag, Harvey, Fredericton and Salisbury, a subsidy not exceeding eighty thousand dollars per annum for twenty years, forming in the whole together with the subsidy authorized by the Act forty-seventh Victoria, chapter eight, for a line of railway connecting Montreal with the said harbours of St. John and Halifax by the shortest and best practicable route, which the line above described is found to be, a subsidy not exceeding two hundred and fifty thousand dollars per annum, the whole of which shall be paid in aid of the construction of such line of railway for a period of twenty years, or a guarantee of a like sum for a like period as interest on the bonds of the company undertaking the work; the said subsidy to be so granted upon the terms and conditions of, and payable out of the Consolidated Revenue Fund in the manner specified in the said

last mentioned Act in respect of the subsidy thereby authorized in aid of the said line of railway." Per year for twenty years
(*additional*) 80,000

- 64.** "The Governor in Council may grant a further subsidy as an aid towards procuring free access as hereinafter described for the trains and traffic of the Canadian Pacific Railway Company from St. Martin's Junction, near Montreal, or from some other point on their railway to be selected by the said company, to the harbour of Quebec, in such a manner as shall be approved by the Governor in Council, that is to say: an additional subsidy not exceeding three hundred and forty thousand dollars, constituting, together with the subsidy authorized by the said last mentioned Act to aid in procuring the extension of the Canadian Pacific Railway to Quebec, and the subsidy also thereby authorized to aid in constructing a line connecting the Canadian Pacific Railway at the Jacques Cartier Union Junction with the North Shore Railway proper (which subsidies shall be applicable to the said first mentioned purpose) a sum not exceeding in the whole the sum of one million five hundred thousand dollars, payable out of the Consolidated Revenue Fund of Canada" (*additional*)..... 340,000

The said Act further provided as follows in relation to this matter:—

"If it should be expedient so to do in order to facilitate such access, the Governor in Council may acquire the North Shore Railway, and may apply the said sum of one million five hundred thousand dollars, or any part thereof, in aid of such acquisition; and upon such acquisition may transfer and convey or lease the said railway to the Canadian Pacific Railway Company, subject to such obligations as the Government shall have assumed in acquiring it."

By the Act 49 Vic., cap. 10 (1886). (*Assented to 2nd June, 1886*):

- 65.** For a railway from a point at or near Moncton, to Buctouche, in the Province of New Brunswick, thirty miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... \$ 96,000
(*NOTE.—Further subsidized by 50-51 Vic., ch. 24.*)
- 66.** For a railway from Ingersoll *via* London to Chatham, in the Province of Ontario, eighty miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 256,000
- 67.** To the Northern and Western Railway Company for ten miles of their railway, intervening between the termini of the portions of their railway for which subsidies are already granted, the one from Fredericton and the other from Indiantown, and an extension of two miles down to deep water at Chatham, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 32,000

(*NOTE.—In addition to subsidies granted by Acts 47 Vic., ch. 8, and 48-49 Vic., ch. 59.*)

- 68.** To the Caraquet Railway Company, for ten miles of their railway from the end of the present subsidized portion at Lower Caraquet to Shippegan, in the Province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 32,000
(NOTE.—*In addition to subsidies granted by 46 Vic., ch. 25, and 47 Vic., ch. 8. This addition was cancelled by Act 50-51 Vic., ch. 24.*)
- 69.** To the Lake Erie, Essex and Detroit River Railway Company, for thirty-seven miles of their railway, from Windsor to Leamington, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 118,400
(NOTE.—*Cancelled by Act 50-51 Vic., ch. 24.*)
- 70.** To the Thunder Bay Colonization Railway Company, for fifty-six miles of their railway, from the end of the present subsidized section to a point near Crooked Lake, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 179,200
(NOTE.—*Cancelled by 51 Vic., ch. 3.*)
- 71.** To the Parry Sound Colonization Railway Company, for forty miles of their railway, from the Village of Parry Sound to the Village of Sandridge, on the line of the Northern Pacific Junction Railway, in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 123,000
- 72.** For a railway from a point at or near New Glasgow or St. Lin, to or near to Montcalm, in the Province of Quebec, eighteen miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole. 57,600
- 73.** For a railway from Hereford to the International Railway, in the Township of Eaton, in the Province of Quebec, thirty-four miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole. 108,800
- 74.** For a railway from St. Félix to Lake Maskinongé, Parish of St. Gabriel, in the Province of Quebec, ten miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 32,000
- 75.** For a railway from Glenannan to Wingham, in the Province of Ontario, five miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 16,000
- 76.** For a railway from a point at or near the McCann Station on the Intercolonial Railway, to the Joggins, on Cumberland Basin, in the Province of Nova Scotia, twelve miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 38,400
(NOTE.—*Further subsidized by Act 50-51 Vic., ch. 24.*)
- 77.** For a railway from L'Assomption to L'Epiphanie, in the Province of Quebec, three miles and a half, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 11,200

- 78.** To the Montreal and Western Railway Company, for seventy miles of their railway from St. Jérôme, north-westerly towards Desert, in the Province of Quebec, a subsidy of \$5,161 per mile, in lieu of the subsidies granted by 46 Victoria, chapter 25, and 47 Victoria, chapter 8, not exceeding in the whole..... 361,270
(NOTE.—*Substituted*)
- 79.** For a railway from St. Andrews to the Canadian Pacific Railway at or at any point east of the Town of Lachute, in the County of Argenteuil, in the Province of Quebec, seven miles, in lieu of the subsidy granted by 47 Victoria, chapter 8, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 22,400
(NOTE.—*Substituted.*)
- 80.** To the Canada Atlantic Railway Company, for twelve miles of their railway from Clark's Island to Valleyfield and from Lacolle, in the Province of Quebec, to the International boundary, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 38,400
(NOTE.—*In addition to the subsidy granted by 48-49 Vic., ch. 59; also further subsidized by 50-51 Vic., ch. 24, for a bridge across the St. Lawrence.*)
- 81.** For a railway from Truro to Newport, in the Province of Nova Scotia, forty-nine miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 156,800
- 82.** To the Quebec and Lake St. John Railway Company, for ninety-five miles of their railway, from a point fifty miles north of St. Raymond to Lake St. John, in the Province of Quebec, a subsidy not exceeding \$1,961 per mile, nor exceeding in the whole (in addition to the subsidy granted by 45 Victoria, chapter 14, and 46 Victoria, chapter 25, of \$3,200 per mile.)..... 186,295
(NOTE.—*Further subsidized by the Act 50-51 Vic., ch. 24.*)
- 83.** To the Cap Rouge and St. Lawrence Railway Company, for twelve miles of their railway from Lorette *via* Cap Rouge to Quebec, in the Province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 38,400
- 84.** For the construction of wharves and landing stages on the line of the railway from Long Sault to the foot of Lake Temiscamingue, a subsidy of..... 6,000
(NOTE.—*In addition to the subsidy for the construction of the line granted by 48-49 Vic., ch. 59. The addition was cancelled by Act 50-51 Vic., ch. 24.*)
- 85.** To the Gananoque, Perth and James' Bay Railway Company, seventeen miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 54,400
- 86.** For a railway from St. Eustache to St. Placide, County of Two Mountains, eighteen miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 57,600

- 87. For a railway from a point on the Intercolonial Railway through the Stewiacke Valley, on the line which will afford facilities of communication with the Iron Mines, Spring Side, Upper Stewiacke, and Musquodoboit settlements, twenty-five miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 80,000
- 88. For a railway from Yamaska to the River St. Francis, in the Province of Quebec, ten miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 32,000
- 89. For a railway from Perth Centre Station on the New Brunswick Railway, to a point near Plaister Rock Island, in the Province of New Brunswick, twenty-eight miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 89,600
(NOTE — *Cancelled by 50-51 Vic., ch. 24.*)
- 90. For a railway from Fredericton to the Village of Prince William, in the Province of New Brunswick, twenty-two miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 70,400
- 91. For a railway from a point on the Intercolonial Railway near Newcastle or *via* Douglastown to a point on the River Miramichi, opposite the Town of Chatham, in the Province of New Brunswick, six miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 19,200
- 92. For a railway from a point on the Canadian Pacific Railway to Eganville, in the Province of Ontario, twenty-two miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 70,400
(NOTE.— *Cancelled by 51 Vic., ch. 3.*)
- 93. To the Belleville and North Hastings Railway Company, for seven miles of their railway from the Village of Madoc to the Junction with the Central Ontario Railway at Eldorado, in the Province of Ontario, a subsidy (in addition to the subsidy of \$1,500 per mile granted by 48-49 Victoria, chapter 59) not exceeding \$1,700 per mile, nor exceeding in the whole 11,900
(NOTE.— *Additional.*)
- 94. To the Napanee, Tamworth and Quebec Railway Company, for eighteen miles of their railway from Tamworth to Tweed, in lieu of the subsidy granted by 48-49 Victoria, chapter 59, a subsidy of 70,000
(NOTE.— *Further subsidized by the Act 50 51 Vic., ch. 24.*)
- 95. To the Albert Railway Company, for their railway from Salisbury to Hopewell, in the Province of New Brunswick, which is a feeder to the Intercolonial Railway, in the form of a loan, repayable at such time and secured in such manner as the Governor in Council determines, a subsidy of..... 15,000

"The subsidies hereinbefore mentioned as to be granted to the companies named for that purpose, shall be granted to such companies, respectively; the other subsidies shall be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively. All the lines for the construction of which subsidies are granted shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in the agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location, also, of every such line of railway shall be subject to the approval of the Governor in Council, and all the said subsidies, respectively, shall be payable out of the Consolidated Revenue Fund of Canada, by instalments on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister: Provided, always, that the granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights, as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council may determine.

By 50-51 Vic., cap. 24 (1887). (*Assented to 23rd June, 1887:—*

- | | | |
|-------------|--|----------|
| 96. | To the St. Catharines and Niagara Railway Company, for twelve miles of their railway from the City of St. Catharines to the bridge over the Niagara River, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... | \$38,400 |
| 97. | To the Vaudreuil and Prescott Railway Company, for thirty miles of their railway from Vaudreuil towards Hawkesbury, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... | 96,000 |
| 98. | To the Richmond Hill Junction Railway Company, for five miles of their railway from Richmond Hill Junction on the Northern Railway of Canada to Richmond Hill Village, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... | 16,000 |
| 99. | To the Drummond County Railway Company, for thirty miles of their railway from Drummondville towards Nicolet, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... | 96,000 |
| 100. | To the Joggins Railway Company, for one and a quarter miles of their railway extending from the southern end of the portion subsidized by the Act forty-ninth Victoria, chapter ten, to the wharves, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (<i>additional</i>)..... | 4,000 |

101. To the Moncton and Buctouche Railway Company, for two miles of their railway from the west end of the portion subsidized by the Act forty-ninth Victoria, chapter ten, to Moncton, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (<i>additional</i>).....	6,400
102. To the Beauharnois Junction Railway Company, for thirty miles of their railway from St. Martin's towards St. Anicet, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
103. To the Harvey Branch Railway Company, for three miles of their railway from the southern terminus of the Albert Railway to Harvey Bank, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	9,600
104. To the Brantford, Waterloo and Lake Erie Railway Company, for eighteen miles of their railway from the Town of Brantford to the Village of Hagersville or the Village of Waterford, or some intermediate point on the Canada Southern Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	57,600
105. To the Guelph Junction Railway Company, for sixteen miles of their railway from its junction with the Canadian Pacific Railway to the Town of Guelph, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	51,200
106. To the Massawippi Railway Company, for ten miles of their railway from a point on the Atlantic and North-Western Railway, near the Village of Magog, to Ayer's Flat Station, on the Massawippi Valley Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	32,000
(NOTE.—Cancelled by 51 Vic., ch. 3.)	
107. To the Napanee Tamworth and Quebec Railway Company, for four miles of their railway from the north end of the section subsidized by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter fifty-nine, to Tweed, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (<i>additional</i>).....	12,800
108. To the Dominion Lime Company, for seven miles of their railway from a point on the Quebec Central Railway, in the Township of Dudswell to the Dudswell Lime Company's quarries, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	22,400
109. To the South Norfolk Railway Company, for seventeen miles of their railway from Port Rowan to the Town of Simcoe, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	54,400
110. To the Jacques Cartier Union Railway Company, for extending and completing their railway, a subsidy of.....	20,000

111. For a line of railway from Mount Forest to Walkerton, twenty-four miles in length, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	76,800
112. To the Oshawa Railway and Navigation Company, for seven miles of their railway from Port Oshawa towards Raglan, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..	22,400
113. To the Saguenay and Lake St. John Railway Company, for thirty miles of their railway from Lake St. John towards Chicoutimi, or from Chicoutimi towards Lake St. John, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	96,000
(NOTE.—Transferred by 51 Vic., ch. 3, to the Quebec and Lake St. John Railway Co.)	
114. To the Great Eastern Railway Company, for thirty miles of their railway from the River St. Francis to the Arthabaska Railway, at St. Grégoire Station, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
115. To the Ontario and Pacific Railway Company, for six miles of their railway from the northern end of the portion subsidized by the Act forty-seventh Victoria, chapter eight, to the town of Perth, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (additional).....	19,200
116. To the Caraquet Railway Company, for seven miles of their railway from Lower Caraquet to Shippegan, in lieu of the subsidy granted by the Act forty-ninth Victoria, chapter ten, a subsidy not exceeding in the whole (substituted).....	32,000
117. To the St. Lawrence and Lower Laurentian and Saguenay Railway Company, for the section of their railway from Grand Piles, on the St. Maurice River, to its junction with the Quebec and Lake St. John Railway, in lieu of the subsidy granted by the Act passed in the Session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter fifty-nine, for a line of railway from Grand Piles, on the St. Maurice River, to its Junction with the Lake St. John Railway, a distance of about fifty miles, a subsidy of (substituted)	217,600
118. To the St. John Valley and River du Loup Railway Company, for twenty-two miles of their railway from the Village of Prince William towards the Town of Woodstock, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	70,400
119. To the Lake Temiscamingue Railway Company, for four short sections of railway, in all about two miles in length, to overcome the rapids of the Ottawa River, known as "La Mi-Charge," "La Cave," "Les Erables," and "La Montagne," and for the construction of wharves and landing stages at these rapids, to connect the	

<p>Canadian Pacific Railway at Mattawa with Lake Temiscamingue by steamboats, railways and other works (in lieu of a portion two miles in length, out of the eight miles of railway subsidized by the Act passed in the Session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter fifty-nine, under which about six miles of railway have already been built from the foot of Long Sault proper to the foot of Lake Temiscamingue, and in lieu also of the subsidy granted by the Act forty-ninth Victoria, chapter ten), a subsidy of (<i>substituted</i>)..</p>	<p>12,400</p>
<p>120. To the Carillon and Grenville Railway Company, for twelve miles of their railway from St. Eustache to Sault au Recollet, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... ..</p>	<p>38,400</p>
<p>121. To the Minudie Branch Railway Company, for five and a-half miles of their railway from its junction with the Joggins Railway, near the River Hebert railway bridge, to the Village of Minudie, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole</p>	<p>17,600</p>
<p>122. To the Lake Temiscamingue Colonization and Railway Company, for ten and a-half miles of their railway from the Long Sault to Lake Kippewa, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (<i>additional</i>)..... ..</p>	<p>33,600</p>
<p>123. To the Leamington and St. Clair Railway Company, for two miles of their railway from the north end of the section subsidized by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter fifty-nine, to the Village of Comber, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (<i>additional</i>)..... ..</p>	<p>6,400</p>
<p>124. To the Cumberland Railway and Coal Company, for fourteen miles of their railway from a point on the Spring Hill and Parrsboro' Railway, near Spring Hill, to a point on the railway between Oxford and New Glasgow, near Oxford Village, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... ..</p>	<p>44,800</p>
<p>125. To the Montreal and Champlain Junction Railway Company, a subsidy of (<i>in addition to the subsidy granted by Act 48-49 Vic., ch. 59.</i>)</p>	<p>64,000</p>
<p>126. To the Quebec and Lake St. John Railway Company, for nine miles of their railway, the distance which the previous subsidies granted are short of covering from the City of Quebec to Lake St John, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (<i>in addition to subsidies granted by Acts 45 Vic., ch. 14; 46 Vic., ch. 25; 48-49 Vic., ch. 59, and 49 Vic., ch. 10</i>)..... ..</p>	<p>28,800</p>
<p>127. To the Temiscouata Railway Company, for thirty miles of a branch of their railway from Edmundston towards the St. Francis River, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole</p>	

(in addition to subsidies granted for their main line by 45 Vic., ch. 14, and 48-49 Vic., ch. 58)..... 96,000

(NOTE.—Cancelled by 51 Vic., ch. 3.)

- 128.** To the Cornwallis Valley Railway Company, for thirteen miles of their railway from Kentville to Kingsport, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 41,600
- 129.** To the Nova Scotia Central Railway Company, for thirty-four miles of their railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 108,800
- 130.** To the Tobique Valley Railway Company, for fourteen miles of their railway from Perth Centre Station towards Plaister Rock Island, in lieu of the subsidy granted by the Act forty-ninth Victoria, chapter ten, for a railway from Perth Centre Station, on the New Brunswick Railway, to a point near Plaister Rock Island, a subsidy of (*substituted*)..... 89,600
- 131.** For a railway from Woodstock towards Centreville, twenty miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 64,000
- 132.** For a railway bridge over the St. Lawrence River at Coteau Landing, on the line of the Canada Atlantic Railway, a subsidy of fifteen per cent. on the value of the structure, not to exceed (*in addition to subsidies granted for the main line by 48-49 Vic., ch 59, and 49 Vic., ch. 10*)..... 180,000
- 133.** To the Lake Erie, Essex and Detroit River Railway Company, for twenty-seven miles of their railway, in lieu of the subsidy granted by the Act forty-ninth Victoria, chapter ten, a subsidy not exceeding (*substituted*)..... 118,400

For the purpose of granting corporate powers to persons or companies undertaking the construction of railways or parts of railways, mentioned in the next preceding section, for the construction of which no corporate powers exist at the time of the passing of this Act, the Governor in Council may grant to them, under such corporate name as he shall deem expedient, a charter conferring upon them the franchises, privileges and powers requisite for the said purposes, as the Governor in Council shall deem most useful or appropriate to the said undertaking; and such charter being published in the *Canada Gazette*, with any Order or Orders in Council relating to it, shall have force and effect as if it were an Act of the Parliament of Canada.

The subsidies hereinbefore mentioned as to be granted to companies named for that purpose, shall be granted to such companies respectively; the other subsidies, including subsidies granted for railways over a line extending beyond a point to which any company hereinbefore mentioned by name is authorized to construct their railway, shall be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively; all the lines for the con-

struction of which subsidies are granted shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council; and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the Company with the Government, and which the Government is hereby empowered to make; the location, also, of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon completion of the work subsidized, except as regards the subsidy for the bridge over the St. Lawrence River upon which shall be paid fifteen per cent. of the value of work done on monthly progress estimates, certified by the Chief Engineer, and upon the approval of the Minister of Railways and Canals.

The granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running power or traffic arrangements and other rights, as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

Notwithstanding anything contained in the Act forty-fifth Victoria, chapter fourteen, or in the Act forty-sixth Victoria, chapter twenty-five, the balances of the sums granted for a railway from St. Raymond to Lake St. John and to the Quebec and Lake St. John Railway Company by the said Acts respectively, which have not yet been paid by the Government, may be paid at any time within one year from the passing of this Act, subject to the conditions in the said Acts contained.

By the Act 51 Vic., ch. 3 (1888). (*Assented to 22nd May, 1888*):—

134. To the Ottawa and Parry Sound Railway Company, for 22 miles of their railway from a point on the Canadian Pacific Railway to Eganville, in lieu of the subsidy granted by 49 Victoria, Chapter 10, for a railway from a point on the Canadian Pacific Railway to Eganville, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (<i>substituted</i>).....	\$ 70,400 00
135. To the Nova Scotia Central Railway Company, for 46 miles of their railway, in the Province of Nova Scotia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (<i>additional</i>).....	147,200 00
136. To the Montreal and Champlain Junction Railway Company, for 3 miles of their railway from the end of the present subsidized section, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (<i>additional</i>).....	9,600 00

- 137.** To the Massawippi Junction Railway Company, for their railway from a point on the Atlantic and North-West Railway near the Village of Magog, to Ayer's Flat Station on the Massawippi Valley Railway, in lieu of the subsidy granted by 50-51 Victoria, Chapter 24, a subsidy of (*substituted*)..... 32,000 00
- 138.** To the Pontiac Pacific Junction Railway Company, for bridging the several channels of the Ottawa River at Culbute and west thereof, a subsidy of \$31,500, to be paid out monthly as the work progresses, upon the certificate of the Chief Engineer of Government Railways, in the proportion which the value of the work executed bears to the value of the whole work undertaken, and for three miles of their railway extending from a point three miles east of Pembroke to Pembroke in the Province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole \$9,600, provided that the entire work subsidized upon this railway shall be completed within four years from the passing of this Act, the subsidy granted by this Act not to exceed in the whole (*additional*) 41,100 00
- 139.** To the Port Arthur, Duluth and Western Railway Company, for 84½ miles of their railway from Port Arthur towards Gun Flint Lake, in lieu of the subsidies granted by 48-49 Victoria, Chapter 59, and 49 Victoria, Chapter 10, for the construction of a railway from Murillo Station to Crooked Lake, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (*substituted*)..... 271,200 00
- 140.** To the Quebec and Lake St. John Railway Company, for 30 miles of their railway from Lake St. John towards Chicoutimi, or from Chicoutimi towards Lake St. John, being a transfer made at the request of the Saguenay and Lake St. John Railway Company of the subsidy granted to them by 50-51 Victoria, Chapter 24, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (*substituted*)..... 96,000 00
- 141.** To the Temiscouata Railway Company, for 20 miles of their branch railway from Edmundston towards the St. Francis River, in the Province of Quebec, in lieu of the subsidy granted by 50-51 Victoria, Chapter 24, a subsidy of (*substituted*)..... 100,000 00
- 142.** To the Quebec Central Railway Company, for the construction and completion of a line of railway from Saint Francis Station to a point on the Atlantic and North-West Railway near Moose River, 90 miles, in lieu of the balance of the subsidy, unearned, granted by 47 Victoria, Chapter 8, a subsidy not exceeding \$21,191.54 per annum for twenty years, or a guar-

	antee of a like sum for a like period as interest on the bonds of the company, such annual subsidy for twenty years representing a grant in cash of (<i>substituted</i>).....	288,000 00
143.	To the Central Railway Company of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 55 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the Company) of 4,052 tons of used iron rails and fastenings loaned to the St. Martin's and Upham Railway Company, now forming part of the Central Railway, which rails and fastenings stand in the Public Accounts as an asset of.....	83,612 54
144.	To the Elgin, Petitcodiac and Havelock Railway Company of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the Company) of 2,201 tons of used iron rails and fastenings loaned to the Elgin Branch Railway, now forming part of the Elgin, Petitcodiac and Havelock Railway, which rails and fastenings stand in the Public Accounts as an asset for.....	44,252 82
145.	To the Kent Northern Railway Company of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the Company) of 2,549 tons of used iron rails and fastenings loaned to the Company, which rails and fastenings stand in the Public Accounts as an asset for.....	58,334 27
146.	To the Halifax Cotton Company, of Nova Scotia, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the Company) of 233 tons of used iron rails and fastenings loaned to the Company, which rails and fastenings stand in the Public Accounts as an asset for.....	4,335 00
147.	To the Steel Company of Canada, in Nova Scotia, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the Company) of 597 tons of used iron rails and fastenings loaned to the Company, which rails and fastenings stand in the Public Accounts as an asset for.....	11,964 66
148.	To the Albert Railway Company of New Brunswick, a grant as subsidy (the section of road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an	

Order in Council has been passed authorizing their transfer to the Company) of 726 tons of used iron rails and fastenings loaned to the Company, which rails and fastenings stand in the Public Accounts as an asset for.....

14,665 45

- 149.** To the Chatham Branch Railway of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the Company) of 958 tons of used iron rails and fastenings loaned to the Company, which rails and fastenings stand in the Public Accounts as an asset for.....

24,439 84

All the lines, for the construction of which subsidies are granted, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications, and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the Company with the Government, and which the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies respectively, payable in cash, shall be payable out of the Consolidated Revenue Fund of Canada by instalments, on the completion to the satisfaction of the Minister of Railways and Canals, of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon completion of the work subsidized.

LAND SUBSIDIES.

By 47 Vic., cap. 25, clause 7, (1884). (*Assented to 19th April, 1884*):—

- 150.** “The Governor in Council is hereby authorized, in aid of the construction of a railway from some point on the Canadian Pacific Railway to Hudson Bay to make a free grant of not more than six thousand four hundred acres for each mile of railway within Manitoba, and not more than twelve thousand eight hundred acres for each mile in the North-West Territories.”

By 48-49 Vic., cap. 60 (1885). (*Assented to 20th July, 1885*):—

- 151.** To the North-Western Coal and Navigation Company (Limited), Dominion lands to an extent not exceeding three thousand eight hundred acres for each mile of the company's railway from Medicine Hat to the coal banks on the Belly River, about one hundred and ten miles.
- 152.** To the Manitoba and South-Western Colonization Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway, from its commencement at Winnipeg to its terminus at Whitewater Lake, about one hundred and fifty miles.

[1888]

xliii

- 153.** To the Manitoba and North-Western Railway Company, Dominion lands to the extent of six thousand four hundred acres for each mile of the company's railway, for the whole distance from Portage la Prairie to the crossing of the south branch of the River Saskatchewan, twenty miles from Prince Albert, about four hundred and thirty miles.
- 154.** To the Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway, from its commencement near Regina, to the navigable waters of Long Lake.

The said grants, and each of them, may be so made in aid of the construction of the said railways respectively, in the proportion and upon the conditions fixed by the Orders in Council made in respect thereof,—each of the said enterprises being respectively subject to any modification thereof which may hereafter be made by the Governor in Council; and except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively of the cost of survey of the lands and incidental expenses, at the rate of ten cents per acre in cash on the issue of the patents therefor.

By 49 Vic., cap. 11 (1886). (*Assented to 2nd June, 1886*):—

- 155.** To the Manitoba and North-Western Railway Company, Dominion lands to the extent of six thousand four hundred acres per mile for each mile on the company's branch railway running from a point on the main line of that railway, at or near Todburn, in a north-westerly direction through the county of Russell to the Assiniboine River, near the town of Shellmouth, about twenty-six miles.
- 156.** To the North-West Central Railway Company, or to such other company as may undertake the construction of the railway or a railway from a point on the Manitoba and North-Western Railway, *via* Rapid City, westward, Dominion lands to the extent of six thousand four hundred acres for each mile of the company's railway, for the whole distance from Brandon Station, on the Canadian Pacific Railway, or from such point on the Manitoba and North-Western Railway as aforesaid, to Battleford, in the Provisional District of Saskatchewan, about four hundred and fifty miles.
- 157.** To the Wood Mountain and Qu'Appelle Railway Company, Dominion lands to the extent of six thousand four hundred acres for each mile of the company's railway for the whole distance commencing at a point in township number four, in range number thirty, west of the second meridian, in the Dominion lands system of survey, passing through the town of Fort Qu'Appelle, to join the Manitoba and North-Western Railway at a point to be fixed for that purpose by the Governor in Council, about two hundred and forty miles.

The said grants, and each of them may be so made in aid of the construction of the said railways respectively, in the proportions and upon the conditions fixed by the Orders in Council made in respect thereof,—each of the said enterprises

being respectively subject to any modification thereof which may hereafter be made by the Governor in Council; and, except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively of the cost of survey of the lands and incidental expenses at the rate of ten cents per acre in cash on the issue of the patents therefor.

By 50-51 Vic. cap. 23 (1887). (*Assented to 23rd June, 1887*):—

- 158.** The Governor in Council may grant to the Alberta and Athabaska Railway Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway from some point on the Bow River or Canadian Pacific Railway, at or between Calgary and Crowfoot Creek, to a point near the town plot of Edmonton, about three hundred miles.
- 159.** The Governor in Council may grant to the Qu'Appelle, Long Lake and Saskatchewan Railway and Steamboat Company, Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the company's railway, from a point near the northern terminus of the completed portion of that railway, at or near Long Laketon, on the navigable waters of Long Lake, to a point at or near where the fifty-second parallel of latitude crosses the South Saskatchewan River, thence to a point at or near the elbow of the North Saskatchewan River, with branches to Prince Albert and Battleford, about three hundred and twenty-five miles.
- 160.** The Governor in Council may grant to the Medicine Hat Railway and Coal Company Dominion lands to an extent not exceeding six thousand four hundred acres for each mile of the Company's railway, from a point at or near Medicine Hat, on the line of the Canadian Pacific Railway, to the coal field in or near townships twelve and thirteen, range six, west of the fourth principal meridian, a distance of about eight miles, to be selected out of such lands as are at the disposal of the Government in the proximity of the line of the Company's railway.

The said grants, and each of them may be so made in aid of the construction of the said railways respectively, in the proportions and upon the conditions fixed by the Orders in Council made in respect thereof,—each of the said enterprises being respectively subject to any modification thereof which may hereafter be made by the Governor in Council; and, except as to such conditions, the said grants shall be free grants, subject only to the payment by the grantees respectively of the cost of survey of the lands and incidental expenses at the rate of ten cents per acre in cash on the issue of the patents therefor.

GOVERNMENT ACTION AS TO SUBSIDIZED LINES.

With regard to the above enumerated lines of railway, the following represents the action taken and the progress made in so far as the Dominion Government has cognizance or concern; only those lines and companies being mentioned as to which definite steps, other than merely preliminary, have been taken towards securing the subsidy. Information has been brought down to the 31st of December, 1888.

Since the system of subsidy to railway enterprise was commenced, the following are the sums paid over, namely:—

For the fiscal year 1883-84, ended on June 30, 1884	\$	208,000	00
do 1884-85	do	1885	403,245 00
do 1885-86	do	1886	2,171,249 00
do 1886-87	do	1887	1,406,533 00
do 1887-88	do	1888	1,027,041 92
			<u>\$5,216,068 92</u>

Add to the above for the six months that have elapsed since, namely, from the 30th of June, 1888, to the 31st December, 1888.....		347,070	00
---	--	---------	----

Total payments to the 31st of December, 1888,	\$5,563,138	92
---	-------------	----

The Canadian Pacific Railway is not included in the above, nor is the subsidy to the Quebec Government for the line from Ottawa to Quebec, nor advances made on mortgage to the St. John Bridge Company, to the Albert Railway Company and to the Fredericton and St. Mary's Bridge Company.

The total number of companies to whom payments have been made on subsidy account up to the 31st of December, 1888 (with the above exceptions) is 37.

A tabulated statement of payments will be found in Appendix 3, page 6.

The following pages show, in alphabetical sequence, the position of those companies whose dealings with the Government in respect of subsidies are not yet closed. Reports of previous years give information as to companies whose subsidies have been earned and paid prior to the 1st of July, 1887.

Albert Southern Railway Company.

(See No. 36.)

By the Act 47 Vic., chap. 8 (1884), a subsidy not exceeding \$51,200 was authorized towards the construction of a line from Hopewell (now called Albert) to Alma, N.B.

Under the authority of an Order in Council of the 8th of May, 1885, a contract for this work, namely, from Albert to the mouth of Salmon River, in the parish of Alma, was made with the Albert Southern Railway Company on the 23rd of that month; the line to be completed by the 1st of July, 1887. By an Order in Council of the 4th of April, 1887, the company were permitted to change their location, a route *via* Derry's Corner being adopted.

The time for completion was extended to 1st of July, 1888. During the fiscal year the sum of \$18,428.57 has been paid from the company's subsidy, making the total payments up to the 31st of December, 1888, \$19,428.57.

Atlantic and North-West Railway Company.

(Sec Nos. 20 and 63.)

By the Act 47 Vic., ch. 8, the grant of the following subsidy was authorized :—

“For the construction of a line of railway connecting Montreal with the harbours of St. John and Halifax by the shortest and best practicable route, after the report of competent engineers, a subsidy not exceeding \$170,000 per annum, for fifteen years, or a guarantee of a like sum for a like period as interest on bonds of the company undertaking the work, per year for fifteen years, \$170,000.”

By the Act 48-49 Vic., ch. 58 (1885), the grant of a further subsidy was authorized as follows :—

“For a line of railway from the south bank of the St. Lawrence River, opposite or near Montreal to the harbours of St. Andrews, St. John and Halifax, *via* Sherbrooke, Moosehead Lake, Mattawamkeag, Harvey, Fredericton and Salisbury, a subsidy not exceeding eighty thousand dollars per annum for twenty years, forming in the whole, together with the subsidy authorized by the Act forty-seventh Victoria, chapter eight, for a line of railway connecting Montreal with the said harbours of St. John and Halifax by the shortest and best practicable route, which the line above described is found to be, a subsidy not exceeding two hundred and fifty thousand dollars per annum, the whole of which shall be paid in aid of the construction of such line of railway for a period of twenty years, or a guarantee of a like sum for a like period as interest on the bonds of the company undertaking the work; the said subsidy to be so granted upon the terms and conditions of and payable out of the Consolidated Revenue Fund in the manner specified in the said last mentioned Act in respect to the subsidy thereby authorized in aid of the said line of railway.”

An application having been made for the said subsidies by the International Railway Company, and they having agreed to conform to the necessary conditions and requirements, and having evidenced their ability to construct and operate the road, entry into contract with them was authorized by an Order in Council of the 19th of November, 1885, and such contract was executed on the 14th of December, 1885, they undertaking to complete a line from a point on the south bank of the St. Lawrence at or near Caughnawaga, about 9 miles above Montreal, to connect with the Intercolonial Railway at Moncton by the 1st of July, 1889.

The International Railway Company subsequently disposed of their interest in this contract to the Atlantic and North-West Railway Company, and that company were accepted as contractors by an Order in Council dated the 13th of November, 1886, the agreement made thereunder being dated the 6th of December, 1886.

The Atlantic and North-West Railway Company, having powers under their charter to enter into arrangements for the crossing of the State of Maine, obtained,
[1888]

from the Maine Central Railway Company, the privilege of acquiring running powers for 99 years over the portion of their road between Mattawamkeag and Vanceborough, on the boundary line. These arrangements were accepted by an Order in Council of the 30th December, 1886.

The total subsidies available under vote of Parliament for this work of railway construction, amounting, as above stated, to \$250,000 a year, for a term of twenty years, it became necessary so to apportion this amount as to secure the building of the links to connect with the roads already in existence in New Brunswick and Nova Scotia leading to the harbours named.

Accordingly, an estimate of the cost of the several sections of the surveyed line, as adopted, was made, and as the result an Order in Council was passed on the 14th of June, 1886, apportioning the subsidy, the arrangement being as follows:—For the section from the River St. Lawrence to Lennoxville, \$71,100. The section from Lennoxville to Moose River is covered by the International Railway, already constructed. For the section between Moose River and Mattawamkeag, a station on the Maine Central Railway, \$115,500. From Mattawamkeag to Harvey Station on the New Brunswick Railway, running arrangements have been made over existing roads. For the section between Harvey and a point on the Intercolonial Railway near Salisbury Station, \$63,400. The remaining distance is by the Intercolonial Railway to Moncton.

By Orders in Council of the 3rd of September, 1886, and 24th of May, 1887, approval was given to location plans for the distance between the River St. Lawrence (at Caughnawaga) and Lennoxville, passing through the town of St. Johns, P. Q., Farnham and South Stukely to Magog, thence passing to the north of Lake Magog; the Government location being thus modified, and the distance slightly increased, namely, from 100 miles to $101\frac{5}{16}$.

The portion of the road between Caughnawaga on the South Branch of the St. Lawrence, opposite Montreal, and Sherbrooke having been practically completed, and also the portion commencing from the end of the section built by the International Railway Company, and running as far as Mattawamkeag, these two sections were inspected, and under date the 31st of December, 1888, an Order in Council has been passed authorizing the payment of the annual subsidy applicable, namely, \$186,600.

By the construction of these two sections and the intermediate links of already built railway, acquired as part of the system, direct communication is now afforded between the River St. Lawrence at Caughnawaga and Harvey. Connection is made at McAdam and at Harvey with the system of the New Brunswick Railway leading to St. Andrews and St. John; thence, over the Intercolonial Railway, with Moncton and Halifax, pending the full completion of the scheme for the shorter route from Harvey to Moncton direct.

The Atlantic and North-West Railway Company having under their charter, 42 Vic., chap. 65 (1879) power to construct a bridge across the St. Lawrence, near Lachine, submitted for approval plans for such a bridge, to be situated about a mile below the entrance of the Lachine Canal, and about nine miles above Montreal. These plans, having been favourably considered from an engineering point of view, and

also with regard to navigation, were approved of by an Order in Council dated 1st of April, 1882, subsequently modified by an Order of the 14th of November, 1885. The plans so approved show a steel bridge, with stone piers, having two spans of 408 feet each, two of 269 feet each, and eight of 242 feet each. The central 216 feet of each of the two channel spans affords a height of 60 feet above ordinary summer water level; these two spans are on the cantilever principle. The bridge is completed.

By an indenture dated the 6th of December, 1886, the Canadian Pacific Railway Company have obtained a lease in perpetuity of the line and interests of the Atlantic and North-West Railway Company.

Baie des Chaleurs Railway Company.

(See Nos. 42 and 6.)

The Act 47 Vic., ch. 8, authorized the expenditure of \$300,000 (revoted in the year 1885) for the construction of a branch of the Intercolonial Railway, to extend for a distance of 20 miles eastward, from Metapediac towards Paspébiac.

Tenders for the work were received, but none of them coming within the limit of expenditure authorized by Parliament, an offer made by the Baie des Chaleurs Railway Company to build and operate this section as a part of their own road from Metapediac to Paspébiac for the amount, was accepted by an Order in Council of the 18th of September, 1885, and a provisional contract was entered into with them on the 7th of November, the section to be finished by the first of July, 1888, plans being furnished and the work supervised by the Department.

By the Act 46 Vic., ch. 25 (1883) a subsidy had been authorized in favour of this company towards the construction of their said road; the limit fixed by the Act being \$3,200 a mile, for 100 miles, or a total of \$320,000.

Provision, however, having been made, as above stated, for the building of the first 20 miles of this distance, the contract entered into with the company, also on the 7th of November, 1885, as authorized by an Order in Council, also dated the 18th of September, for the work under this subsidy, dealt with the construction of the last 80 miles only. It contained a clause under which, subject to authorisation from Parliament to that end, the portion, namely, \$3,200 a mile, applicable to the first 20 mile section of the road under the 100 mile subsidy of 1883, should be transferred to the second 20 mile section as an additional subsidy therefor, making the grant for such section \$6,400 a mile.

To this arrangement, approval of Parliament was given, the two agreements above mentioned being ratified and confirmed by the special Act 49 Vic., ch., 17; the date for the completion of the road being fixed by the Act as the 1st of December, 1888, in place of the 25th of May, 1887, as contemplated by their agreement. By an Order in Council of the 14th of June, 1888, the time has been further extended, to the 1st of January, 1890.

The plans for the first 20 miles having been furnished by this Department, works were commenced, and up to the end of the fiscal year, namely, the 30th June, 1888, there was paid to the company the sum of \$300,300. A further sum of \$15,000 has since been paid, making the total payments up to the 31st of December, 1888, \$315,500.

The location has been approved up to the 60th mile by Orders in Council, and on the 27th November, 1888, the company asked for inspection of the road for this distance.

Beauharnois Junction Railway.

(See No. 102.)

By the Railway Subsidy Act, 50-51 Vic., ch. 25, the grant of a subsidy not exceeding \$96,000, was authorized in favour of the Beauharnois Junction Railway Company, for their railway from St. Martin towards St. Anicet, the estimated distance being 30 miles.

On the 21st of November, 1887, and under the authority of Orders in Council of the 1st of October and 2nd of November, a contract for the work was made with the company, namely, from St. Martin to Valleyfield towards St. Anicet, the road to be completed by the first of December, 1888. By the Order first named approval was also given to the location of the road from its junction with the Montreal and Champlain Junction Railway at St. Martin's, to Valleyfield, 19 $\frac{69}{100}$ miles. An inspection of the road for a distance of ten miles has been requested by the company, but up to the 31st of December, 1888, no portion of the subsidy has been paid.

Belleville and North Hastings Railway Company.

(See Nos. 54 and 93.)

By the Act 48-49 Vic., ch. 59 (1885) the grant of a subsidy not exceeding \$10,500, was authorized in favour of the Belleville and North Hastings Railway Company, for a line of railway, about 7 miles long, from the village of Madoc to a point of junction with the Central Ontario Railway, at Eldorado, and by the Act 49 Vic., ch. 10 (1886) a further subsidy was granted to the company for the same railway, namely, \$11,900, making a total subsidy of \$22,400. Under authority of an Order in Council of the 14th of November, 1887, a contract was made with the company on the 12th of December, for the work. The road has been built, and the payment of the subsidy for the actual distance, 6.84 miles, has been authorized by an Order in Council dated the 29th of December, 1888, the amount being \$21,888.

Brockville, Westport and Sault Ste. Marie Railway Company.

(See No. 48.)

By the Act 48-49 Vic., chap. 59 (1885), aid was granted to an extent not exceeding \$128,000 towards the construction of the portion between Brockville and Westport, about 40 miles, of the line of the Brockville, Westport and Sault Ste. Marie Railway.

Under the authority of an Order in Council of the 28th of April, 1886, a contract was made with the company on the 16th of July, 1886, the subsidized road to be finished by the 1st of August, 1889.

Up to the close of the fiscal year, the company had received no portion of the subsidy, but subsequently to that date, the sum of \$45,000 has been paid them, this being the total amount paid up to the 31st of December, 1888.

Brantford, Waterloo and Lake Erie Railway Company.

(See No. 104)

By the Act 50-51 Vic., ch. 24, authority was given for the grant of a subsidy of \$57,600 to the above company for 18 miles of their railway from Brantford to Hagersville or Waterford or some intermediate point on the Canada Southern Railway.

Under an Order in Council of the 4th of August, 1888, a contract was made with the company for a line from Brantford to Waterford, the work to be completed by the 1st of August, 1891. An Order of the same date approved of the location, the actual distance being $16\frac{3}{4}$ miles. No portion of the subsidy had been paid up to the 31st of December, 1888.

Buctouche and Moncton Railway Company.

(See Nos. 65 and 101).

By the Act 49 Vic., chap. 10 (1886), assistance was authorized for the construction of a railway about 30 miles long, to connect Buctouche, N.B., with the Intercolonial Railway at or near Moncton, the subsidy not to exceed \$96,000.

By the Act 50-51 Vic., chap. 24, an additional subsidy of \$6,400 was granted for two miles additional, making the total subsidy \$102,400.

Under an Order in Council of the 10th September, 1886, an agreement, dated the 14th of that month, was entered into with the Buctouche and Moncton Railway Company for the execution of this work by the 1st of July, 1887. Up to the close of the fiscal year the sum of \$61,053.57 had been paid from the company's subsidy, and no further payment has been made.

Canada Atlantic Railway Company.

(See Nos. 60, 80 and 132.)

By the Acts 48-49 Vic., ch. 59, and 49 Vic., ch. 10, the Canada Atlantic Railway Company were subsidized to the extent not exceeding \$134,400, for a line from Clarke's Island, in the St. Lawrence, opposite Valleyfield, through Lacolle to the International boundary, about 50 miles; also from the present Ottawa terminus to the Chaudière Falls, and under the authority of Orders in Council, dated the 17th of September, 1885, and 1st of July, 1886, contracts have been made with the company for the work in question. The date for full completion has been extended by an Order in Council of the 17th of November, 1888, to the 1st of August, 1890. Under date the 4th of December, 1888, the company have applied for the inspection of the Chaudière section.

Upon due inspection, payments have been made, under Orders in Council, the last dated the 24th of August, 1886, to the extent of \$92,864; the work done and so paid for comprises the whole portion between Clarke's Island and Lacolle, a distance of 43.18 miles.

By the Act 50-51 Vic., ch. 24, the grant of a subsidy not exceeding \$180,000 was authorized for a bridge across the River St. Lawrence at Coteau Landing on the line of this railway.

The Canada Atlantic Railway Company possess powers under the Acts 35 Vic., ch. 83, and 42 Vic., ch. 57, to build this bridge, subject to the approval of the Governor General in Council, and upon Proclamation in the *Canada Gazette* showing such approval. The company having submitted satisfactory plans of the proposed work and site, these have been approved by Orders in Council of the 23rd February, 1887, and 26th of November, 1888, and a proclamation has been published in the *Canada Gazette* of the 10th of December, 1888.

An agreement dated the 5th of December, 1888, has been entered into with the company for the construction of the said bridge, a low level structure, on certain conditions, specifications and descriptions approved by an Order in Council of the 12th of that month, with a view to their obtaining the subsidy authorized by the Act 50-51 Vic., ch. 24, above mentioned.

A supplementary agreement framed in the interests of navigation and of the public for the operation of the swing to be built in this bridge has been approved by an Order in Council of the 29th of December, 1888, and will be held as part and parcel of the main agreement for the construction of the bridge. It requires the maintenance of a signal service at a point about one mile above the bridge, and the observance of such rules and regulations as are considered necessary for the protection of traffic down the navigable channel of the river.

The main features of the bridge as definitely proposed to be built by the company are as follows: From the north shore to Giroux Island, five spans, one 154 feet clear opening; two swing spans each 160 feet clear, and two trusses each 165 feet. From Giroux Island to Round Island 11 spans, each of 186½ feet clear opening. From Round Island to Clarke's Island four spans each of 213 feet clear opening, all the above being the width of the openings at summer water level. The total length of the bridging to be executed, including the spans, is about 4,100 feet. The superstructure will, it is proposed, be of iron, rivetted lattice work, the width 16 feet clear, inside the end posts, and the minimum height 32 feet, the rail level being 20 feet above minimum summer water level. The estimated cost of the superstructure, including the swing, is \$470,000. The masonry work is in progress.

Caraquet Railway Company.

(See Nos. 7, 41, 68 and 116.)

Under an Order in Council, dated the 6th of May, 1884, the subsidies authorized by Parliament in 1883 and 1884, for the road of this company from a point near Bathurst, on the Intercolonial Railway, to Shippegan Harbour, amounting to \$192,000, have been granted to them. An agreement was executed under date the 20th

[1888]

January, 1885, for the construction of the line, the portion from Caraquet to Gloucester Junction Station, near Bathurst, to be completed by the 25th May, 1887, and the whole road by the 1st of July, 1888. By an Act, 49 Vic., ch. 10, a further subsidy of \$32,000 was authorized, covering the last ten miles of the road; for this, however, another Act, 50-51 Vic., ch. 24 (1887), was substituted, giving the same subsidy for 7 miles. A contract was made with the Company on the 19th February, 1887, for this subsidy. Of the total subsidies granted, namely, \$224,000, there was paid during the fiscal year \$40,050, making total payments \$210,050. The road is completed with the exception of certain work and the supply of rolling stock, to secure the completion of which, the sum of \$13,950 has been withheld.

Central Railway Company of New Brunswick.

(See Nos. 40 and 143.)

By the Act of 1884, 47 Vic., chap. 8, a subsidy not exceeding \$128,000 was granted in aid of the construction of about 40 miles of the Central Railway from the head of Grand Lake to a point on the Intercolonial Railway between Sassex and St. John, N B.

Under the authority of an Order in Council of the 5th of June, 1886, a contract was made with the Central Railway Company, on the 7th July, 1886, for a line from Salmon River at the head of Grand Lake to Norton on the Intercolonial Railway, the work to be completed by the 1st of July, 1888. Certain work has been executed but the contract obligations have not been carried out, and no portion of the subsidy has been paid. The subsidy has now lapsed.

By the Act 51 Vic., ch. 3, a grant as a subsidy to this Company was authorized of certain used iron rails to the value of \$83,612.54, loaned to the St. Martins and Upham Railway Company, which railway has been acquired by the Central Railway Company; the condition of the grant being that such rails should first be replaced by new steel rails. The transfer has not been made up to the 31st of December, 1888.

Chignecto Marine Transport Railway Company.

(See No. 5.)

On the 3rd February, 1882, this company (which received incorporation the same year, by Act 45 Vic., chap. 76) made a proposal to the Government for the construction of a line of railway for the transport of ships overland across the Isthmus of Chignecto from Tidnish, on Bay Verte in the Gulf of St. Lawrence, to a point at or near the mouth of the River La Planche, in the Bay of Fundy, and by the Act 45 Vic., ch. 55, authority was given for the grant of a subsidy of \$150,000 a year for 25 years, in aid of the work.

No definite action was, however, taken until the 6th of October, 1885, when an Order in Council was passed authorizing entry into agreement with the company, subject to the approval of Parliament, and such agreement was executed on the 4th of March, 1886. Under its terms, the subsidy payable is to be \$170,602 a year for 20 years, or such portion thereof as may be required to bring the net earnings to 7 per cent. per annum on the authorized share and bond capital of the company,

\$5,500,000, and to be granted only during the satisfactory performance of the services contemplated, such services comprising the raising, transport, and lowering of vessels of 1,000 tons burden, registered, with full cargo. Should the earnings exceed 7 per cent. per annum, one-half of such surplus is to be paid to the Government until repayment of the whole amount received by said company under their subsidy. The whole work is to be completed and equipped by the 1st of July, 1889.

By a special Act, 49 Vic., ch. 18 (1886), this agreement was confirmed and ratified.

By a further special Act, 51 Vic., ch. 4 (1888), the time for the completion of the work, for subsidy purposes, was extended to the 1st of July, 1890, with, if required, a farther extension for 24 months, but under penalty.

The company having submitted plans, the same were approved by an Order in Council of the 23rd of May, 1888, and steps necessary to the expropriation of the lands required have been taken by the company.

Cornwallis Valley Railway Company.

(See No. 128.)

By the Act 50-51 Vic., ch. 24 (1887) the grant of a subsidy to this company to the extent of \$41,600 was authorized, for 13 miles of their railway from Kentville to Kingsport.

Under an Order in Council of the 29th of March, 1888, they were admitted to contract on the 28th of May, the road to be completed by the 1st of October, 1889.

Up to the 31st of December, 1888, no portion of the subsidy had been paid.

Cumberland Railway Company.

(See No. 124.)

By the Act 50-51 Vic., ch. 24 (1887) the grant to this company of a subsidy to the extent of \$41,800 was authorized, for 14 miles of their railway from a point on the Spring Hill and Parrsboro' Railway, near Spring Hill, to a point on the Oxford and New Glasgow Railway, near Oxford.

The company having applied, they were admitted to contract on the 12th of April, 1888, under an Order in Council of the 12th of March, the work to be completed by the 1st of August, 1891. An Order of the same date approved of the location.

No portion of the subsidy has been paid up to the 31st of December, 1888.

Dominion Lime Company.

(See No. 108.)

By the Act 50-51 Vic., ch. 24 (1887), the grant of a subsidy to the Dominion Lime Company was authorized, namely, for a railway of an estimated length of seven miles starting from a point on the Quebec Central Railway, in the township of Dudswell, to the Dudswell Lime Company's quarries, the amount not exceeding \$22,400.

A contract was made with the company on the 12th October, 1887, and the road having been inspected, the sum of \$11,840 has been paid under an Order in Council dated the 31st of December, 1887. No further payment has been made up to the 31st of December, 1888. The road, $4\frac{8.0}{10.0}$ miles long, is, however, practically completed.

Drummond County Railway Company.

(See No. 99.)

By the Railway Subsidy Act of 1887, 50-51 Vic., ch. 24, the grant of aid to an extent not exceeding \$96,000 was authorized to the Drummond County Railway Company for 30 miles of their railway from Drummondville towards Nicolet, P.Q.

Under the authority of an Order in Council of the 12th of November, 1887, which also approved of the location plans for $12\frac{1}{2}$ miles, a contract was made with the company on the 1st of December, 1887, covering a line from the South Eastern Railway at the Village of Drummondville to the South West branch of the River Nicolet, the road to be completed by the 1st of August, 1891.

Under an Order in Council of the 17th of February, 1888, the sum of \$15,057 has been paid. No further payment has been made up to the 31st of December, 1888.

Elgin, Petiteodiac and Havelock Railway Company.

By the Act 51 Vic., chap. 3. (1888), certain used iron rails from the Intercolonial Railway, valued at \$44,252.82, which had been loaned to the Elgin Branch Railway, now part of the line of the above named company, were changed from a loan to a subsidy for that company, on the condition that they should first be replaced on the track with new steel rails.

The transfer had not been made up to the 31st of December, 1888.

Fredericton and St. Mary's Bridge Company.

By the special Act 50-51 Vic., ch. 26 (1887), the Governor in Council was authorized to make advances (secured by a mortgage) to the Fredericton and St. Mary's Bridge Company, in aid of the construction of a railway bridge over the river St. John, such advances not to exceed 80 per cent. of the expenditure as made, nor, in the whole \$300,000.

Upon submission of satisfactory plans for such bridge and its approaches, an Order in Council was passed on the 25th of August under which a deed of mortgage and agreement was executed on the 12th of October, 1887, covering the works in question, and running for a term of 15 years from the date of the first advance, the interest payable being at the rate of 4 per cent. per annum. The company proceeded to construction and have received under Orders in Council, the last dated the 14th of November, 1888, advances to the aggregate of \$297,000. The work having been inspected, authority was given on the 14th of November, 1888, for the opening of the bridge for public traffic. The work connects the Fredericton Railway at Fredericton with the Northern and Western Railway at St. Mary's.

[1888]

Great Eastern Railway Company.

(See Nos. 88 and 114.)

By the Act 49 Vic., ch. 10, authority was given for the grant of a subsidy to an extent not exceeding \$32,000, on an estimated distance of 10 miles, towards the construction of a line from Yamaska to the River St. Francis, Que.; and the Great Eastern Railway Company having applied, and having satisfactorily shown their ability to perform the work, a contract was made with them on the 12th of October, 1886, under the authority of an Order in Council of the 9th of that month, the time for completion being fixed as the 1st of October, 1887.

The road having been completed and inspected, the whole of the subsidy due for its actual distance, 6 miles, namely, \$19,200, was paid under an Order in Council of the 27th of March, 1887.

By the Act 50-51 Vic., ch. 24, authority was given for the grant of a subsidy to the company to an extent not exceeding \$96,000 for 30 miles of their railway from the River St. Francis to the Arthabaska (Grand Trunk) Railway at St. Grégoire, and under an Order in Council an agreement was entered into with them for the work, the date being 16th, March 1888. The location plans have been approved of by an Order in Council of the 3rd of March, 1888, covering the distance between Pierreville (River St. Francis) and St. Grégoire, the time for completion has been extended to the 1st of August, 1891. No payment has been made up to the 31st of December, 1888.

Great Northern Railway Company.

(See Nos. 33, 37, 72 and 79.)

By the Act 47 Vic., ch. 8, (1884), a subsidy not exceeding \$32,000 was granted to this company for the construction of a line from St. Jérôme to New Glasgow, Que.; the estimated length being 10 miles.

Under the authority of an Order in Council of the 3rd February, 1885, a contract for the work was entered into with the company on the 14th of that month, the road to be completed by the 1st of July, 1885.

The line was duly completed and inspected, under an Order in Council of the 2nd of March, 1885, payment was made therefor, namely, for 7.84 miles, \$25,088.

By the Act 49 Vic., ch. 10, 1886, a subsidy not exceeding \$57,600 was authorized for a line from New Glasgow to Montcalm, a distance of about 18 miles. The Great Northern Railway Company having applied for it, it was granted to them by an Order in Council of the 18th July, 1887, which also approved of the location. The contract was made on the 19th of August, 1887, the road to be completed by the 1st of August, 1890. No payment has been made up to the 31st December, 1888.

By the Act 49 Vic., ch. 10, a subsidy not exceeding \$22,400 was granted for a line from St. Andrews to Lachute, Que. For this subsidy the above named company have applied; no contract however has yet been made.

Guelph Junction Railway Company.

(See No. 105.)

By the Subsidy Act 1887, 50-51 Vic., ch. 24, authority was given for the grant of a subsidy not exceeding \$51,200 to the Guelph Junction Railway Company for sixteen miles of their railway from its junction with the Canadian Pacific Railway to the town of Guelph, Ontario.

Under date the 1st of October, 1887, an Order in Council authorized entry into contract, and such contract was signed on the 5th of November, the date fixed for the completion of the road being the 1st of January, 1889.

The location plans for the road, 15½ miles, having been approved, and the work inspected, payment has been made of the sum of \$16,000 under an Order in Council dated the 21st of December, 1888.

Harvey Branch Railway Company.

(See No. 103.)

By the Subsidy Act of 1887, 50-51 Vic., chap., 24, the grant of a subsidy to the Harvey Branch Railway Company was authorized to an extent not exceeding \$9,600 in aid of a line about three miles in length, extending from the southern terminus of the Albert Railway to Harvey Bank.

A contract was entered into with the company on the 3rd of October, 1887, for the work. The road has been built and inspected, but no portion of the subsidy has been paid up to the 31st December, 1888.

Hereford Branch Railway Company.

(See No. 73.)

By the Act 49 Vic., chap. 10, 1886, authority was given for the grant of a subsidy to the extent of \$108,800 for a railway from Hereford to the International Railway in the township of Eaton, an estimated distance of 34 miles.

The Hereford Branch Railway Company having applied, an Order in Council of the 30th of December, 1887, authorized entry into contract with them for the work and a contract was made accordingly, dated the 31st of March, 1888. The date for completion is fixed as the 1st of August, 1890.

Up to the 31st of December, 1888, no portion of the subsidy has been paid, but 20 miles of the road have been built and inspected.

International Railway Company.

(See No. 10.)

In 1883 Parliament granted a subsidy of \$156,800 to this company for forty-nine miles of their railway, between Sherbrooke and the International boundary line, the object being to enable them to complete their road and lay steel rails. They entered into contract on the 20th of July, 1883, and under successive Orders in Council, they had been paid, prior to the commencement of the year, a total sum

[1888]

lvii

of \$144,000, upon a distance of forty-five miles. Under the authority of an Order in Council, dated the 2nd of July, 1887, they have now been paid, for the remaining $2\frac{8}{10}$ miles up to Lennoxville, the further sum of \$3,960; making a total payment of \$152,960, and completing the contract work.

Irondale, Bancroft and Ottawa Railway Company.

(See No. 24.)

By the Act 47 Vic., chap. 8 (1884), the Irondale, Bancroft and Ottawa Railway Company were subsidized, to an extent not exceeding \$160,000, for a line, about 50 miles long, to connect the Victoria Branch of the Midland Railway with the village of Bancroft.

With the sanction of an Order in Council of the 10th July, 1886, a contract was made with the company on the 19th of August, 1886, the first 10 miles to be completed by the 1st of December, 1886, and the remainder by the 1st of July, 1888.

Under the authority of an Order in Council of the 14th of February, 1887, \$15,000 has been paid. No further payment has been made up to the 31st of December, 1888, and the unpaid balance has lapsed.

Joggins Railway Company.

(See No. 76 and 100.)

By the Act 49 Vic., chap. 10 (1886), authority was given for the grant of aid to an extent not exceeding \$38,400, towards the construction of a railway, the estimated length of which is 12 miles, from a point at or near McCann Station, on the Intercolonial Railway, to the Joggins, on Cumberland Basin, N. S.

The Joggins Railway Company having applied for this subsidy, and the application being satisfactory, a contract was made with them on the 30th of November, 1886, under the authority of an Order in Council on the 5th of October, the line to be completed by the 1st of November, 1887.

A further subsidy to this company not exceeding \$4,000 having been authorized by the Act 50-51 Vic., chap. 24 (1887), towards the construction of an extension of the line, $1\frac{1}{4}$ mile long, to the wharves on Cumberland Basin, a contract was made with them for the work on the 13th of October, 1887.

Up to the 31st of December, 1888, the sum of \$26,138.78, has been paid from the company's subsidy.

Lake Erie, Essex and Detroit River Railway Company.

(See No. 133.)

By the Act 50-51 Vic., ch. 26 (1887) the grant of a subsidy to the extent of \$118,400, for 27 miles of their railway, was authorized in lieu of a subsidy granted the previous year, and on the 6th of April, 1888, they were admitted to contract for the construction of a line from Walkerville, on the Detroit River, to Cedar Creek Station, under the authority of an Order in Council of the 25th of March.

The line having been built and inspected, the company were authorized, on the 22nd of December, to open it for traffic.

No portion of the subsidy has been paid up to the 31st of December, 1888.

Lake Temiscamingue Colonization Railway Company.

(See Nos. 55, 84, 119 and 122.)

By the Act 42-49 Vic., ch. 59, a subsidy was authorized in aid of the construction of a line of railway from Long Sault to the foot of Lake Temiscamingue, surmounting certain rapids on the River Ottawa. The limit of the amount was \$25,600, covering a total distance of 8 miles. Under the authority of an Order in Council of the 17th November, 1885, a contract was entered into for the construction of 6 miles, to be completed by the 1st of January, 1887.

By the Subsidy Act, 49 Vic., chap. 10, a further subsidy of \$6,000 was authorized for the building of wharves and landing stages in connection with this line. This was subsequently cancelled, and by the Act 50-51 Vic., chap. 24, 1887, the definition of portions of the road to which the preceding Acts had granted subsidies was corrected, the amount of the subsidy, however, remaining the same, namely, a total of \$31,600.

In conformity with an express provision to that effect in clause 2 of the above cited Act, Letters Patent were issued under an Order in Council of the 20th of July, 1886, published in the *Canada Gazette* of the 24th, granting a charter for the construction of this railway to the "Lake Temiscamingue Colonization Railway Company." Up to the close of the fiscal year the sum of \$17,400 had been paid, and since that date a further sum of \$9,000, making a total of \$26,400 up to the 31st of December, 1888.

By the Act 50-51 Vic., ch. 24, the grant of a subsidy to the extent of \$33,600 was authorized for 10½ miles of this company's line from Long Sault to Lake Kipewa. Entry into contract for this subsidy has been authorized by an Order in Council of the 15th of June, 1888, but the contract is not yet signed.

Leamington and St. Clair Railway Company.

(See Nos. 56 and 123.)

By the Act 48-49 Vic., chap. 59 (1885), aid was granted to an extent not exceeding \$44,800 towards the construction of a line of railway from a point on the Canada Southern Railway near Comber, to Leamington, on Lake Erie.

By the Act 50-51 Vic., chap. 24, a further subsidy of 6,400 was granted, making the total subsidy \$51,200.

Under authority of an Order in Council of the 13th of April, 1886, a contract for this work was made with the Leamington and St. Clair Railway Company on the 3rd of May, 1886, the road to be completed by the 1st of August, 1889. After inspection of the road and under Order in Council the sum of \$32,000 has been paid to the company up to the 31st of December, 1888.

[1888]

lix

Minudie Railway Company.

(See No. 121.)

By the Act 50-51 Vic., chap. 24, 1887, authority was given for the grant of a subsidy to the extent of \$17,600 to the above company for 5½ miles of their railway from its junction with the Joggins Railway, near the River Hebert Railway Bridge, to the village of Minudie, Nova Scotia.

Under authority of an Order in Council of the 10th of February, a contract, dated the 26th of March, 1888, has been made with the company for this work, which is to be completed by the 1st of March, 1889.

Up to the 31st of December, 1888, no portion of the subsidy has been paid.

Montreal and Champlain Junction Railway Company.

(See Nos. 51, 125 and 136.)

By the Act 48-49 Vic., chap. 59, a subsidy was authorized to be granted to this company for a line from Brosseau's to Dundee, not exceeding \$30,000. The work was completed and the subsidy was paid in the year 1885-86.

By an Act 50-51 Vic., chap. 24, a further subsidy not exceeding \$64,000 was authorized to be granted to this company. Authority has been given for entry into contract by an Order in Council of the 26th August, 1887, and the contract was signed on the 25th of January, 1883, for a line from Fort Covington to Massena Springs, 21¾ miles. Up to the close of the fiscal year \$16,400 had been paid; no further payments have been made to the 31st of December, 1888.

By the Act 51 Vic., chap., 3, a further subsidy of \$9,600 was authorized for 3 miles additional.

Montreal and Lake Maskinongé Railway Company.

(See No. 74.)

By the Act 49 Vic., chap. 10 (1886) the grant of a subsidy of \$32,000 for a railway from St. Félix to Lake Maskinongé, P.Q., was authorized, and application being made by the Montreal and Lake Maskinongé Railway Company, an Order in Council of the 1st of October, 1887, accepted them as contractors, and an agreement was entered into accordingly on the 29th of September, covering the distance between St. Félix and St. Gabriel de Brandon, near Lake Maskinongé, the road to be completed by the first of December, 1888. The location plans for the distance, 12¾ miles, were approved by an Order in Council of the 23rd of June, 1888. Under authority of an Order in Council of the 26th of November, 1888, payment has been made of \$19,700 and the time for completion has been extended to the 1st of December, 1889.

Montreal and Sorel Railway Company.

(See No. 47.)

By the Act 48-49 Vic., chap. 59, a subsidy not exceeding \$72,000 was authorized to be granted to this company for a line from St. Lambert to Sorel. Under an [1888]

Order in Council of the 2nd October, 1885, a contract was made with the company on the 14th, and under the authority of Orders in Council, the last dated the 10th of November, 1836, payments have been made, amounting in all to \$69,922, the road, 44.67 miles long, having been completed, with the exception of a small quantity of work, to secure the finishing of which \$1,550 was retained. No further payment has been made up to the 31st of December, 1888.

New Brunswick and Prince Edward Railway Company.

(See No. 46.)

By the Act 48-49 Vic., chap. 59 (1885), a subsidy, not exceeding \$118,400, was granted to the New Brunswick and Prince Edward Railway Company for the construction of a line between the Intercolonial Railway at Sackville Station to the Straits of Northumberland at or near Cape Tormentine, whence, by ferry, communication could be had with the railway system of Prince Edward Island.

Under the authority of an Order in Council, dated the 19th of April, 1886, a contract was entered into with the company for this work on the 18th May, 1886.

Before the close of the fiscal year, payments had been made to the extent of \$113,440, representing the full amount of the subsidy to which the company were entitled.

Napanee, Tamworth and Quebec Railway Company.

(See Nos. 13, 27, 57, 94 and 107.)

In 1883 Parliament authorized a subsidy of \$39,600 to this company, covering their road from Napanee to Tamworth.

A contract, dated 31st December, 1883, was entered into with the company for this work, and upon completion, inspection, and approval of the road, this subsidy was all paid under Orders in Council, the last dated the 28th of July, 1884.

In the Session of that year Parliament authorized the grant of a further subsidy not exceeding \$3,200 a mile or a total of \$70,400, for an extension of this company's road from Tamworth to Bogart and Bridgewater. In 1885, however, in substitution for this subsidy, Parliament authorized the grant to the company, of a subsidy of \$70,000 for a line "from Tamworth towards Bogart and Bridgewater, 16 miles." This, again, was cancelled by the Act 49 Vic., ch. 10 (1886), a subsidy of \$70,000 being granted to the company for 18 miles of their railway from Tamworth to Tweed.

By the Act 50-51 Vic., ch. 24 (1887) a further subsidy to this company, not exceeding \$12,800, was authorized for four miles of their road to Tweed.

Under date the 25th of July, 1888, an Order in Council authorized entry into contract, and approved the location plans from Tamworth to Tweed, 20 miles. The contract was signed on the 31st of July, 1888, covering both subsidies. The road is to be completed by the 1st of August, 1890. No portion of these subsidies has been paid up to the 31st of December, 1888.

Northern and Pacific Junction Railway Company—Gravenhurst to Callander.

(See Nos. 1 and 16)

For the purpose of affording to the Province of Ontario the advantage of direct railway communication with the North-West, it was necessary that a road should be built connecting the Canadian Pacific Railway with the existing railways of Ontario, and such a line was subsidized by the Acts of 1882 and 1883, to the extent of \$12,000 a mile, for a distance of 110 miles, or a total of \$1,320,000. It extends, southwards, from the Canadian Pacific Railway at Nipissing Junction, east of Lake Nipissing, to the Village of Gravenhurst, a distance of 111½ miles, there connecting with the railway system of Ontario. Under the authority of an Order in Council, dated the 10th of April, 1884, a contract was entered into on the 12th of April, 1884, with the Northern and Pacific Junction Railway Company (formerly the Northern and North-Western and Sault Ste. Marie Railway Company), for the construction of this line, the same to be completed by the 1st of May, 1886.

Connection was made from north to south in January, 1886, a through train running on the 27th of that month.

By an Order in Council of the 3rd of May, 1886, the time for completion was extended to the 1st of August, 1886.

Up to the 31st of December, 1886, the total payments aggregated \$1,284,400, leaving the sum of \$35,600 to cover certain incomplete work. No further payments have been made.

Northern and Western Railway Company.

(See Nos. 11, 29, 50 and 61.)

In 1883 Parliament authorized the grant of a subsidy to this company of \$102,400, towards the construction of thirty-two miles of their railway, from the Intercolonial Railway, near the Miramichi, to Moran's, near Demphy Village, N.B. This action was suggested to the House, in view of an application made for aid for a line extending from the Intercolonial Railway at the crossing of the Miramichi River, *via* Boiestown and the Nashwaak Valley to Gibson, on the River St. John, opposite Fredericton. In 1884, no work having meantime been commenced, Parliament voted money for the construction, by the Government, of the portion of this distance, extending from Derby Station, on the Intercolonial Railway, to Indiantown, and authorized the grant to this company of a subsidy of \$128,000 in aid of their railway from Fredericton to Miramichi, "instead of the subsidy proposed in 1883."

The contract for the construction of this subsidized line, from Fredericton to the Miramichi, forty miles in length, was signed on the 24th of December, 1884, an Order in Council on the 16th of that month having given approval to the draft of such contract. The date fixed for completion was the 1st of July, 1888.

The location for the whole distance, forty miles, having been approved of by Orders in Council, and the road having been duly completed and inspected, the whole of the subsidy, \$128,000, was paid to the company.

In 1885, a subsidy in favour of this company was authorized to the extent of \$19,200 for a continuance of their line to Boiestown, and under the authority of an Order in Council of the 6th of November, 1885, a contract was made with the company for the work on the 26th of that month. The location was approved by an Order in Council of the 27th. The line, six miles in length, was to be completed by the 1st of November, 1886. The line being completed, an Order in Council was passed on the 13th of July, 1886, under which payment of \$18,200 was made; the balance, \$1,000, being retained to cover the widening of certain cuttings.

Parliament also, in 1885, authorized the grant of a subsidy to the extent of \$140,800 in aid of the construction of a line of railway from Indiantown, *via* the Miramichi Valley, to its junction with the Northern and Western Railway at or near Boiestown.

The Northern and Western Railway Company having applied for the work, they were accepted, and a contract was made with them on the 26th of November, 1885, as authorized by an Order in Council of the 7th of that month; the location for the whole distance, about 50 miles, being approved of by an Order of the 27th. The line was to be completed by the 1st of August, 1888.

By the Subsidy Act, 49 Vic., ch. 10 (1886) a further grant of \$32,000 to this company was authorized for ten miles of their railway, made up of the portion intervening between the present termini of their already subsidized line and of the two miles extending down to deep water at Chatham.

For this subsidy, a contract was made with the company on the 14th of August, 1886, covering the intervening portion of line only, and omitting the two miles deep water extension. Under date the 12th of August, 1887, they entered into an agreement covering the two miles in question, the amount of subsidy applicable being \$6,400.

By the 31st of December, 1887, the whole road between Gibson, opposite Fredericton, and Indiantown was completed and in operation, the actual distance being 95½ miles. The total subsidy provided for this distance was \$313,600. The amount found to be actually applicable was \$305,600, and the whole has been paid after due inspection and on Orders in Council, the last dated the 31st of December, 1887.

Under date the 29th of November, 1888, an Order in Council passed authorizing payment of the sum of \$6,300 out of the 6,400 of subsidy for the deep water extension at Chatham (\$100 being retained for the completion of certain work), and this amount has been paid.

The portion connecting Indiantown with the Intercolonial Railway, 14 miles, having been built by the Government as a branch for its main road, there is now direct communication between Fredericton and the Intercolonial Railway at Derby, the distance being about 109½ miles.

Nova Scotia Central Railway Company.

(See Nos. 129 and 135.)

By the subsidy Act of 1887, 50-51 Vic., ch. 24, the Nova Scotia Central Railway Company were subsidized for 34 miles of their railway, to an extent not exceeding [1888] lxiiii

\$108,800. Under an Order in Council of the 16th of September, 1887, the company were admitted to contract on the 17th of October, 1887, the work to be executed being a line of railway, from Lunenburg on the east coast of Nova Scotia, westward, to a point in the district of New Germany, together with a spur, about $\frac{3}{4}$ mile long, to Bridgewater Railway Wharf, the whole to be completed by the 31st of December, 1889. No portion of the subsidy has been paid up to the 31st of December, 1888.

By the Act 51 Vic., chap. 3 (1888) the grant of a further subsidy not exceeding \$147,200 was authorized, for 46 miles of the company's railway, and under an Order in Council of the 9th October, 1888, a contract, dated the 15th of October, 1888, was executed, covering a line of railway $39\frac{1}{2}$ miles starting from a point $33\frac{1}{2}$ miles from Lunenburg, and running to Middleton on the Windsor and Annapolis Railway; the work is to be completed by the 31st of December, 1890.

No portion of the subsidy has been paid up to the 31st of December, 1888.

Ontario and Pacific Railway Company.

(See Nos. 31 and 115.)

By the Act 47 Vic., chap. 82, the grant of a subsidy to the Ontario and Pacific Railway Company was authorised, namely, to the extent of \$262,400, on an estimated distance of 82 miles, for a line from Cornwall to Perth, and on the 27th of July, 1886, a contract was made with the company, under the authority of an Order in Council of the first day of that month, for the construction of such line, *via* Newington, Chrysler, Manotick and Franktown, the road to be completed by the 1st July, 1888.

By the Act 50-51 Vic., chap. 24, a further subsidy of \$19,200 for a further distance of 6 miles was granted, making the total subsidy \$281,600.

No portion of the subsidy has been paid up to the 31st of December, 1888.

Ottawa and Gatineau Valley Railway Company.

(See No. 8, 26 and 58.)

By the Act 48-49 Vic., chap. 59 (1885) the grant of a subsidy to this company was authorized (in lieu of subsidies granted in previous years,) namely, for a line of railway from Hull station towards the Village of le Desert, 62 miles, the amount being \$320,000.

The company having applied to enter into contract, an Order in Council was passed on the 4th of June, 1888, admitting them accordingly. The date, for completion is fixed as the 1st of August, 1889.

The location plans of the first 20 miles were approved by an Order in Council of the 11th of July, 1888.

Up to the 31st of December, the contract, though prepared, has not been actually signed, and no portion of the subsidy has been paid.

Pontiac Pacific Junction Railway Company.

(See No. 25 and 138.)

This line was subsidized by Parliament in 1884, to the extent of \$3,200 a mile, not exceeding \$272,000.

Under authority of an Order in Council, dated the 12th of December, 1884, a contract, dated the 22nd of that month, was made with this company for the building of the line subsidized, namely, from Aylmer, Que., to Pembroke, crossing the River Ottawa at a point "not east of Lapasse," the first twenty-seven miles to be completed by the 1st September, 1885 (extended to 15th of December, by Order in Council of the 13th of August, 1885) the second twenty-seven miles by the 1st of July, 1886, and the whole road, estimated at 85 miles west of Aylmer, by the 1st of July, 1887. The time for completion was extended by an Order in Council of the 9th of July, 1887, to the 1st of July, 1888.

Under authority of Orders in Council payments have been made during the past fiscal year to the extent of \$24,158, making a total of \$174,828, for a distance of 71 miles from Aylmer, has been paid out of the full subsidy, \$272,000, the balance unpaid having lapsed on the 1st of July, 1888, under the terms of the Act.

The road is open for public traffic from Aylmer to Coulonge, 59 miles.

By the Act 51 Vic., ch. 3 (1888), a subsidy to this company of \$31,500 was authorized for the bridging of the River Ottawa at Culbute; also a subsidy of \$9,600 for 3 miles of their railway from a point 3 miles east of Pembroke to Pembroke, provided that the entire work subsidized on this railway be completed within four years from the 22nd of May, 1888. No contract has been entered into for the work contemplated by this Act.

Quebec Central Railway Company.

(See Nos. 22 and 143.)

This company was subsidized in 1884, to the extent of \$211,200, in aid of the construction of sixty-six miles of their railway, from Beauce Junction to the International Boundary.

Under the authority of an Order in Council, dated the 2nd of August, 1884, a contract was made with the company on that date for the construction of a line from Beauce Junction on their trunk line, thence up the valley of the River Chaudière to the frontier, the line to be completed by the 2nd of February, 1888.

The location of the first 23 miles was approved of by an Order in Council of the 8th of May, 1885. The amount of the subsidy paid up to the end of the fiscal year 1885-86, under an Order in Council of the 14th of August, 1885, was \$60,342, covering 15½ miles of road inspected, starting from Beauce Junction. No further payment has been made up to the 31st of December, 1888.

In lieu of the balance of this subsidy, which lapsed on the 1st of July, 1888, authority has been given by the Act 51 Vic., ch. 3 (1888), for the grant of a subsidy to this company of \$21,191.54 a year for 20 years, equivalent to a cash grant of
[1888] lxv

\$288,000, for a line of railway from St. Francis Station to a point on the Atlantic and North-West Railway, near Moose River, 90 miles. No contract has yet been made for this work.

Quebec and Lake St. John Railway Company.

(See Nos. 2, 14, 49, 82, 126 and 140.)

By the Subsidy Act of 1882, a subsidy of \$334,000 was granted for a line from St. Raymond to Lake St. John. By the Act of 1883, the Quebec and Lake St. John Railway Company, engaged in the work of constructing this line, were permitted to receive a further subsidy of \$80,000. By the Act of 1885 a subsidy of \$96,000 was authorized for a line extending from the point of their junction with the North Shore Railway (4 miles from Quebec) up to St. Raymond (36 miles from Quebec), conditionally upon the construction of their line to a point 50 miles north of St. Raymond, and by the Act of 1886 a subsidy was authorized, not exceeding \$186,225, for the portion, 95 miles, extending from the point 50 miles north of St. Raymond to Lake St. John.

By the Act 50-51 Vic., chap. 24 (1887), an additional subsidy not exceeding \$28,800 was authorized for a distance of 9 miles, the distance which previous subsidies granted were short of covering from the city of Quebec to Lake St. John. By this Act, authority was given for payment up to the 23rd of June, 1888 (under the usual conditions) of balances available from the subsidies granted in 1882 and 1883. The aggregate of the subsidies granted to this company for the whole distance from Quebec to Lake St. John is \$775,095, the number of miles subsidized being 186.

An agreement was duly entered into on the 4th of September, 1883, in respect of the two subsidies first named, under which this line was to be completed by the 25th of May, 1887, the portion up to Lake Edward to be completed by the 31st of December, 1885, and on the 10th of February, 1886, an agreement was signed covering the third subsidy, that, namely, of 1885. For the subsidies granted in 1886 and 1887, no further contracts are required, these subsidies being applicable to works embraced in the previous contracts.

During the fiscal year 1887-88, there has been paid the sum of \$232,013, making the total payments \$690,004.

The road has been sufficiently completed for immediate operating purposes, and is in operation up to Roberval, 190 miles from Quebec. No further payments have been made up to the 31st of December, 1888.

By the Act 51 Vic., chap. 3, a subsidy to the extent of \$96,000, previously granted to the Saguenay and Lake St. John Railway Company, for 30 miles of their railway from Lake St. John towards Chicoutimi was transferred to this company; and under authority of an Order in Council of the 17th of November, 1888, a contract was made with them on the 5th of December for this work, which starts from Chambord Junction near Lake St. John on their main line; the road to be completed by the 1st of August, 1890. The location for these 30 miles has been approved by an Order in Council of the 17th of November, and the work is in progress, but no portion of the subsidy therefor has been paid up to the 31st December, 1888.

Short Line.

In previous reports, and pending definite conclusions to work and negotiations then in progress, a scheme of some magnitude and importance to the country, whereby a line of railway more direct than the existing one should be constructed to connect the harbours of the Atlantic seaboard with the railway systems to the west of the St. Lawrence has been dealt with under the title "The Short Line."

Now, however, parts of the scheme have been undertaken as Government work, and the remainder is in a fair way to completion under a company; the route comprises the following features:—

1. A line from the River St. Lawrence at Caughnawaga, running *via* Sherbrooke across the State of Maine, to Harvey, Fredericton, Salisbury on the Intercolonial Railway and so to Moncton—connecting on the way with the roads leading to St. Andrews and St. John, N. B. This work is in the hands of the Atlantic and North-West Railway Company.

2. A line from Oxford to New Glasgow, avoiding a long *détour* and joining the Eastern Extension Railway at New Glasgow. This work has been undertaken by the Government.

3. A line from a point on the Island of Cape Breton opposite the Canso terminus of the Eastern Extension on the mainland to Sydney and North Sydney. This is being constructed as a Government work.

Information with regard to these works will be found in the present report under their respective headings.

South Norfolk Railway Company.

(See No. 109.)

By the Act 50-51 Vic., chap. 24, authority was given for the grant of a subsidy of \$54,400 to this company, for 17 miles of their railway from Port Rowan to the town of Simcoe.

Under an Order in Council of the 11th August, 1888, the company were admitted to contract on the 23rd, the date for completion being the 1st July, 1889.

The road having been completed and inspected, the whole of the subsidy, \$54,400, has been paid under an Order in Council of the 29th December, 1888.

St. Catharines and Niagara Central Railway Company.

(See No. 96.)

By the Act 50-51 Vic., chap. 24 (1887), the grant of a subsidy to the extent of \$38,400 to the above company was authorized for 12 miles of their railway from St. Catharines to the bridge over the River Niagara.

The company were admitted to contract on the 5th March, 1888, under an Order in Council of the 12th April, the location being approved by an Order of the same date.

On the 20th December, the road having been built and inspected, the company were permitted to open it for traffic.

Up to the 31st December, 1888, no portion of the subsidy had been paid.

St. John Valley and Rivière du Loup Railway Company.

(See Nos. 90 and 118.)

By the Act 49 Vic., chap. 10 (1886), a subsidy of \$70,400 was authorized for 22 miles of railway from Fredericton to Prince William, New Brunswick, and by the Act 50-51 Vic., chap. 24, a subsidy of \$70,400 was authorized in favour of the St. John Valley and Rivière du Loup Railway Company for 22 miles of railway from Prince William towards Woodstock.

The company having applied for both subsidies, they were admitted to contract on the 26th June, 1888, under an Order in Council of the 21st May, the time of completion being fixed as the 31st July, 1890. This covers both subsidies, aggregating 140,800. The location plans were approved by an Order in Council of the 23rd May.

Up to the 31st December, 1888, no portion of the subsidy had been paid.

Stewiacke Valley and Lansdowne Railway Company.

(See No. 87.)

By the Act 49 Vic., chap. 10 (1886), a subsidy was authorized for a railway from a point on the Intercolonial Railway through the Stewiacke Valley, affording communication with the Iron Mines, Spring Side, Upper Stewiacke and Musquodoboit settlements, 25 miles, the extent of aid not exceeding \$80,000. The Stewiacke Valley and Lansdowne Railway Company having applied for this subsidy, a contract was made with them on the 17th of December, 1886, the line to be completed by the 1st of December, 1889. Up to the 31st of December, 1888, no portion of the subsidy had been paid.

St. Lawrence, Lower Laurentian and Saguenay Railway Company.

(See Nos. 59, 117.)

By the Act 48-49 Vic., chap. 59 (1885), a subsidy of \$217,600 was granted for a line of railway from the Grand Piles, on the River St. Maurice, Que., to a point of junction with the Lake St. John Railway (being in lieu of a subsidy of the previous year).

By the Act 50-51 Vic., chap. 24, this subsidy was repeated in favour of the company named below.

The St. Lawrence, Lower Laurentian and Saguenay Railway Company having applied for this subsidy, and being approved, a contract was entered into with them on the 20th of February, 1886, under authority of an Order in Council of the 6th of that month, which also approved of the location plans, the said location being subsequently amended under an Order in Council of the 25th of August, 1887.

Up to the 30th of June, 1888, the end of the fiscal year, there had been paid to the Company the sum of \$92,813, covering a distance of 22½ miles. No further payment has been made up to the 31st December, 1888.

Témiscouata Railway Company—Rivière du Loup to Edmundston.

(See Nos. 3, 62, 127 and 141.)

Towards the construction of a line from Rivière du Loup or Rivière Ouelle, or from some point between them, to Edmundston, Parliament, in 1882, voted a subsidy of \$240,000, and by the Act 48-49 Vic., ch. 58, a further subsidy, not exceeding \$258,000, was voted for the same work, making a total subsidy of \$498,000.

Under express provisions of this Act a charter was granted by Orders in Council of the 3rd and 6th of October, 1883, to certain persons constituting "The Témiscouata Railway Company," their object being to build the said road, and such charter, being published in the *Canada Gazette* of the 10th of that month, has force and effect as if an Act of Parliament. This charter was subsequently confirmed and amended by the special Act 50-51 Vic., ch. 71, 1887. Under the said charter the company have power to construct a road from the Intercolonial Railway at Rivière du Loup to Edmundston. On the 21st of June, 1886, a contract was duly entered into with the company for the work subsidized, the whole to be completed by the 1st of August, 1889. The location of the road, 80½ miles, *viâ* Lake Témiscouata and the River Madawaska has been approved of by an Order in Council of the 30th of September, 1886. During the fiscal year ended on the 30th June, 1888, payments have been made on Orders in Council and after due inspection, aggregating the sum of \$249,634. Subsequent to that date, further payments have been made to the extent of \$151,470, making the total paid \$401,154 up to the 31st December, 1888, the sum of \$82,446 being retained to cover balance of work required to complete the contract. On the 22nd of November the company were permitted to open the road for traffic.

By the Act 51 Vic., ch. 3 (1888) a subsidy of \$100,000 was granted to this company for 20 miles of their branch railway from Edmundston towards the River St. Francis, in lieu of a subsidy granted the previous year.

The company having applied to be admitted to contract authority was given for such contract by an Order in Council passed on the 31st of December, 1888, which also approved of the location.

Tobique Valley Railway Company.

(See No. 130.)

By the Act 50-51 Vic., ch. 24 (1887) authority was given for the grant of a subsidy to the extent of \$89,600 for 14 miles of the railway of the above company from Perth Centre Station on the New Brunswick Railway towards Plaister Rock Island, in lieu of a subsidy previously granted under an Order in Council of the 9th of July, 1888. A contract was made with this company for the work on the 4th of September, 1888, the date for completion being the 31st of December, 1888.

Up to that date no portion of the subsidy has been paid.

Toronto, Grey and Bruce Railway Company.

(See No. 75.)

By the Subsidy Act of 1886, 49 Vic., chap. 10, the grant of a subsidy, not exceeding \$16,000, was authorized towards the construction of a railway from Glenannan to
[1888]

Wingham, Ont. Under date the 20th of January, 1887, a contract for the work was made with the Toronto, Grey and Bruce Railway Company, as authorized by an Order in Council of the 5th of December, 1886, and the location plans having been approved, and the completed road having been inspected, the amount of subsidy applicable to the work, namely, \$14,656, was paid under Orders in Council, the last dated the 31st of December, 1887.

Western Counties Railway Company.

By the Act 50-51 Vic., ch. 25 (1887), assented to on the 23rd of June, 1887, confirmation was given to an agreement made by the Government with the Western Counties Railway Company, on the 31st of January, 1887, contingently on such confirmation, the agreement itself being thereby, in some respects, modified, as expressed in a subsidiary agreement. Under the provisions of the said Act and agreements, covenants have been entered into which may be summarized as follows:—

The company undertook to withdraw a suit pending against the Crown, in respect of the Windsor Branch Railway, releasing the Government from all claims and also releasing to the Government all right and title to the branch. They have undertaken to build and complete the railway between Annapolis and Digby, N.S., and to complete, equip and put in first-class order the whole of the line from Yarmouth to Annapolis, also to settle all liens on their property and their indebtedness. In order to the fulfilment of the above, they undertook to deposit with the Government the total proceeds of the sale of their debentures, &c., the issue of which was limited to \$4,200,000. The Government on its side, in consideration of these premises, undertook to pay to the company the sum of \$500,000, this amount to be credited to the company and added to the proceeds of the sale of their debentures, which proceeds the Government agree to hold for the purpose, the whole to be applied under certificate of the Government Chief Engineer and Order in Council, to the payment of interest on the debentures, &c., to be issued, to the building and completion of the railway above mentioned, and to the satisfaction of the company's existing obligations; the balance, if any, to be paid to the company. The dates to which the company were bound, as modified by the terms of the Act, are as follows:—

Work to be commenced by the 13th of July, 1887, and the railway between Annapolis and Digby to be completed by the 12th of September, 1888, the company to complete to the satisfaction of the Government by the 12th of September, 1887, all arrangements for the settlement of its indebtedness. Provision was made also for the completion of the line between Annapolis and Digby, by the Government, at its option, from the funds in its hands, in the event of failure on the part of the company to make commencement of work, to progress with the same, or to satisfy the Government as to the arrangement of the settlement of its indebtedness by the dates so fixed. The company has not made deposit of money, nor have they taken any practical steps to carry out the works contemplated. Under these circumstances, and in view of representations urging that the Government should itself, undertake the work, a survey has been made of the country between Digby and Annapolis, under instructions given in October, 1888.

West Ontario Pacific Railway Company.

(See No. 66.)

By the Act 49 Vic., chap. 10, 1886, the grant of a subsidy not exceeding \$3,200 a mile, nor in the whole \$256,000, was authorized in aid of the construction of a railway from Ingersoll, *via* London, to Chatham, Ont., the estimated distance being 80 miles.

Application being made by the West Ontario Pacific Railway Company for the said subsidy, qualified by a request for permission to construct a road from Woodstock to London, in place of from Ingersoll, and it appearing that in view of the greater distance of the line proposed by them from any other existing railway, it would be of more service to the country than the route actually subsidized, they were permitted, by an Order in Council of the 8th of September, 1886, to enter into contract for the road suggested between Woodstock and London, 27 miles, subject, however, to approval by Parliament; this conditional contract was signed on the 2nd of November, 1886, the road to be completed by the 1st of November, 1887.

The company, however, have actually constructed a portion of their railway, the location of which has been duly approved, from London eastwards to a point near Ingersoll, 19 miles, from which connection may be made with both Ingersoll and Woodstock. After inspection they have been paid under an Order in Council of the 1st of September, 1887, the sum of \$60,000, this being the amount of the subsidy applicable to the length built, less the sum of \$300 withheld to cover work remaining to be done.

In the Session of 1887 an Act, 50-51 Vic., chap 62, was passed, authorizing the lease to the Ontario and Quebec Railway Company of part of the line of the West Ontario Pacific Railway Company under construction, from the line of the Ontario and Quebec Railway near Woodstock, *via* London to the River St. Clair, and this lease has been approved by an Order in Council, dated the 15th of October, 1887.

Under an Order in Council dated the 25th of August, 1888, an agreement dated the 4th of September, 1888, has been made with the Ontario and Quebec Railway Company direct for the construction of the line between London and Chatham by the 1st of August, 1890.

LAND SUBSIDIES.

The following companies have been aided by subsidies in land, duly authorized by Parliament and granted by the Department of the Interior:—

They are enumerated here because the engineering details have been dealt with by this Department, the certificate of whose officer has been required prior to handing over to the company concerned any part of the subsidy.

Alberta and Athabaska Railway Company.

(See No. 158.)

By an Order in Council, dated the 21st of May, 1887, a grant of land was made subject to the approval of Parliament, to the company above named for a railway
[1888]

from some point on the Bow River or Canadian Pacific Railway at or between Calgary and Crow Foot Creek, running northerly to a point on the River Athabaska, and crossing the North Saskatchewan at a point near the town plot of Edmonton, a distance of 300 miles, the subsidy being at the rate of 6,400 acres per mile. The first 50 miles, commencing at the southern terminus, were to be completed by the 20th of July, 1888; 100 miles in each of the two years following, and the whole road by the 20th of July, 1891.

By the Act 50-51 Vic., ch. 23, the above grant was confirmed.

Great North-West Central Railway Company.

(See No. 156.)

The inception of the scheme for the construction of a line of railway to extend from Brandon on the Canadian Pacific Railway to Battleford in the Provisional District of Saskatchewan, a distance of about 450 miles, is due to the North-West Central Railway Company (formerly the Souris and Rocky Mountain Railway Company) and under an Order in Council of the 29th of July, 1885, the privilege of purchasing land at the rate of \$1.06 per acre, to the extent of 6,400 acres per mile, previously accorded them, was converted into a free grant of such land (subject to a charge of 10 cents per acre for survey), the grant being contingent on the due completion of their work in stated sections.

This concession did not result in the construction of any section of the road, and difficulties arising, and other applications being put forward for the work, the Act 49 Vic., chap. 11 (1886), granting aid to the extent of 6,400 acres per mile for the same, was made applicable either to the company named or to such other company as might undertake the construction of the road. Subsequently, the Great North-West Central Railway Company were accepted as contractors by an Order in Council of the 22nd of July, 1886, for the building of a railway from Brandon to Battleford under the subsidy named,—being incorporated by an Order in Council of the same date in conformity with the provisions of the Act. The contract itself was actually signed on the 12th of September, 1887. Under an Order in Council of the 15th of June, 1888, the contract time for completion has been extended as follows:—

By the 1st of August, 1889,	50 miles.
do do January, 1890,	100 do
do do do 1891,	150 do
do do do 1892,	150 do

—
Total 450 miles.

The location plans have been approved up to the 50th mile.

Manitoba and North-Western Railway Company.

(See Nos. 153 and 155.)

By the Act 48-49 Vic., ch. 60, authority was given for the grant of aid for a line from Portage la Prairie to the crossing of the south branch of the River Saskatchewan, 20 miles from Prince Albert, about 430 miles, 6,400 acres per mile.

A grant was made to the company by Order in Council of the 4th October, 1884, cancelling previous Orders. The date for completion was fixed by Order in Council of 6th May, 1885, as at the rate of 50 miles a year.

The location and grades having been duly approved, an inspection made of the Company's road showed that up to the 1st December, 1885, they had built and equipped 131 miles of road. An Order in Council of 2nd April, 1886, authorized conveyance of the land grant for this distance. Further inspection shows that since that date and up to the end of December, 1886, a further distance of about 50 miles had been built, making a total of 180 miles on the company's main line.

By the Act 49 Vic., ch. 11, 1886, authority was given for the grant of aid for a branch of this railway, from a point on the main line at or near Todburn, to the River Assiniboine, near Shellmouth, about 26 miles, 6,400 acres per mile.

A grant was made to the company by Order in Council of the 24th May, 1886, completion to be by the 31st December, 1886. Under Orders in Council of the 10th and 21st September, 1886, the line was permitted to start from Binscarth, the Order first named approving the location, to Russell, up to which point the road has been built. This branch, 12 miles long, is completed.

At the present date, the 31st December, 1888, the main line is in operation for traffic purposes from Portage la Prairie to Saltcoats, 206 miles.

Manitoba South-Western Colonization Railway Company.

(See No. 152.)

By 48-49 Vic., cap. 60 (1885), authority was given for the grant of aid for a line from Winnipeg to Whitewater Lake, about 150 miles, 6,400 acres per mile.

The charter of the company, granted by Act 42 Vic., ch. 66 (1879) empowered them to build a line from Winnipeg to Rock Lake, near the west boundary of the Province, the line to be completed in five years, namely, by the 15th May, 1884.

By the Act 43 Vic., ch. 53, 1880, they were permitted to extend the line up to the Souris coal fields.

By the Act 47 Vic., ch. 73, 1884, the company were allowed to lease their line to the Canadian Pacific Railway, the time for the completion of the railway being extended three years beyond the period fixed by their charter, namely, to the 15th of May, 1887.

By an Order in Council of the 4th of October, 1884, the company were subsidized to the extent of 6,400 acres per mile for the whole distance, about 152 miles, from Winnipeg to Whitewater Lake, equal to 972,800 acres, the line for this distance to be completed by the 1st of October, 1885. Location has been approved as follows:—

By an Order in Council of the 3rd November, 1881,—from Aikins Street, Winnipeg, to Section 18, Township 7, Range 4 W., about 52 miles. This is to a point about 4 miles south from what is now known as Elm Creek.

By an Order in Council of the 1st April, 1885—from Section 29, Township 8, Range 4, the point now known as Elm Creek, running west on a tangent to Section 31, Township 7, Range 9. This is the northern branch to the westward.

By an Order in Council of the 10th September, 1885,—from Section 29, Township 8, Range 4, passing through Carman and Manitou and the south shore of White Lake, thence to the western boundary of Manitoba between Ranges 29 and 30. This is the southern branch.

An Order in Council of the 6th April, 1885, modified the grant of the Order in Council of the 4th October, 1884, so as to make it applicable to a change in the location of the road, and to the following sections:—

	Miles.
1. From Township 7, Range 4 (the portion from Winnipeg to Township 7, Range 6, about 50 miles, being already completed), to Manitou.....	110
2. From Manitou to Whitewater Lake.....	20
3. From Township 8, Range 4, to Township 8, Range 9.....	20
	130
	130

The Order also apportioned the 972,800 acres equally amongst these 130 miles = 7,483·84 acres per mile.

An Order in Council of the 11th September, 1885, extended the time for completion to the 6th April, 1886.

An Order in Council of the 5th April, 1886, after report by the Chief Engineer of Railways as to inspection, showing completion of 100 miles, authorized the conveyance of 748,384 acres to the Manitoba South-Western Company.

By an Order in Council of 15th November, 1886, it was decided to apply to certain further extensions completed, namely, on the South Branch, from Boisevain west 21 miles; on the North Branch, from Holland west, 20 miles, the reserve for Section No. 1, made under the Order of the 6th April, 1885. The remainder was to be kept as a subsidy for said Section No. 1, from Township 7, Range 4, to Manitou, the construction of which was deferred: the Canadian Pacific Railway Company, the lessees of the road, having already communication with Manitou from Winnipeg by their southern line.

By an Order in Council of the 6th March, 1887, the location of the northern of the two limits has been approved for a total distance of 60 miles from Elm Creek to Section 10, Township 7, Range 14. Of this, the first 30 miles was for a location previously approved, but now amended.

After further inspection and report by the Government Chief Engineer, showing the railway fit for traffic for a further total distance of 69 miles, an Order in Council was passed on the 19th of March, 1887, authorizing conveyance of the lands representing the subsidy for this distance. At the present date, the 31st December, 1888, the line is in operation from Winnipeg to Glenboro' (northern limb) 104 miles; also on the southern limb as far as Deloraine, a point 100 miles west from Manitou, and 202 miles from Winnipeg.

Medicine Hat Railway and Coal Company.

(See No. 160.)

By the Act 50-51 Vic., chap. 23, authority was given for the grant to the above company of Dominion lands to the extent of 6,400 acres per mile for a railway from a point at or near Medicine Hat, on the line of the Canadian Pacific Railway to the coal field in or near Townships Nos. 12 and 13, Range 6, west of the 4th Principal Meridian, a distance of about 8 miles.

By an Order in Council of the 6th of July, 1887, the grant was made to the company accordingly; it being provided that the road should be completed and in operation by the 31st December, 1888.

By an Order in Council of the 18th December, 1888, an extension of time to the 1st December, 1889, was granted for completion of the road.

North-Western Coal and Navigation Company.

(See No. 151.)

By 48-49 Vic., ch. 60 (1885), authority was given for the grant of aid for a line from Medicine Hat to the coal banks on the Belly River, about 110 miles, 3,800 acres per mile. This was amended by 50-51 Vic., ch. 22—the extent of land being increased to 3,840 acres per mile.

By an Order in Council of the 16th of March, 1885, approval was given to the location of the company's line, and on inspection, in October, 1885, of the road from Dunmore Station, on the Canadian Pacific Railway, to Lethbridge, 109 miles; an Order in Council of the 19th of October, accepted the road as completed.

Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Company.

(See No. 154.)

By Act 48-49 Vic., ch., 60, authority was given for the grant of aid for a line from a point near Regina to the navigable waters of Long Lake, 6,400 acres per mile.

On the 15th December, 1884, an Order in Council was passed granting to the company the above subsidy.

The location of the road from Regina to the navigable waters of Long Lake, a distance of about 23 miles, was approved by an Order in Council of the 25th of September, 1886.

On inspection of the road, made in May, 1886, it was found that it was completed and in running order for a distance of 20·10 miles.

By the Act 50-51 Vic., ch. 23, authority was given for the grant to this company of a subsidy of 6,400 acres per mile for an extension of their line from a point near the northern terminus of the completed portion of the line near Long Lake to a point near the elbow of the North Saskatchewan River, with branches to Prince Albert and Battleford, about 325 miles.

On the 20th of June, 1887, an Order in Council was passed granting this subsidy; the company to construct and have running the first fifty miles of the distance by the 20th of July, 1888, the portion up to the crossing of the South Saskatchewan within the following year, and the whole road by the 25th of May, 1891.

On the 31st August, 1888, under authority of an Order in Council of the 11th, an agreement was entered into with the company, subject to the approval of Parliament, by which certain arrangements are made for the conveyance of men, mails and supplies for the Government up to Saskatoon, a point near the South Saskatchewan, about 160 miles from Regina, for a period of ten years, the Government paying \$50,000 a year on account of such conveyance, the excess of earnings for transport over that amount being paid to the company and the payment of deficiency, if any, being secured to the Government by retention of a portion of the land grant. By this agreement the company are allowed till the 1st of July, 1889, to complete the first fifty miles from Long Lake.

Winnipeg and Hudson's Bay Railway and Steamship Company.

(See No. 150.)

By 47 Vic., cap. 25, clause 7 (1884), authority was given for the grant of aid for a line from some point on the Canadian Pacific Railway to Hudson Bay, viz., for each mile in Manitoba, 6,400 acres, and in the North-West Territories, 12,800 acres.

In the year 1880, by Act 43 Vic., ch. 59, there was incorporated "the Winnipeg and Hudson's Bay Railway and Steamship Company," with powers for the construction of a line from Winnipeg to or near Port Nelson, Hudson Bay.

In 1884, this Act was amended (by chapter 70), and the company were authorized to commence their line either from Winnipeg or from some point between Selkirk and Portage la Prairie, extending to Port Nelson and Churchill or some other point on Hudson Bay; also to construct a branch from any point on their main line to the Canadian Pacific Railway, west of Lake Winnipegosis, construction to be carried on at the rate of at least 50 miles a year.

By the same Act, a previous Act authorizing the amalgamation of this company with the Nelson Valley Railway and Transportation Company was repealed, and authorization was given for the winding up of the company last named and the transfer to the Winnipeg and Hudson's Bay Company of all its property and interests.

By an Act passed in 1886 (49 Vic., ch. 73) the date for completion was fixed as the 2nd of June, 1890.

By an Order in Council of the 11th of May, 1885, all previous orders in this connection were cancelled, and there was granted to the Winnipeg and Hudson's Bay Railway and Steamship Company a subsidy in land, as follows:—

		Acres.
Authorized by Act 47 Vic. c. 25, assented to 19th April, 1884.	} Division A.—From the Canadian Pacific Railway to the northern boundary of Manitoba—estimated distance, 225 miles	1,440,000
	} Division B.—From the boundary to the terminus near the mouth of the Nelson River, Hudson Bay—estimated distance, 425 miles	5,440,000
	} Division C.—The Branch, from a point on the main line, near the northern extremity of Lake Winnipeg, to intersection with the Manitoba and North-Western Railway—estimated distance not to exceed 250 miles (Grant to be subject to approval by Parliament).....	1,600,000

The time for completion was fixed by this Order as 50 miles on division A or B by the 19th of April, 1887, and 50 miles a year thereafter until completion of main line; but if the company do not complete their main line by 11th of May, 1890, they will forfeit their right to a grant for their branch line, which must itself be completed by the 11th May, 1893.

In April, 1888, the Chief Engineer of Government Railways reported showing that forty miles of road were completed with the exception of certain station buildings, &c.

Wood Mountain and Qu'Appelle Railway Company.

(See No. 157.)

By the Act 49 Vic., ch. 11, 1886, the grant of aid was authorized for a railway from a point in Township 4, Range 30, west of the 2nd meridian, passing through Fort Qu'Appelle to the Manitoba and North-Western Railway, about 240 miles, 6,400 acres per mile.

A grant was made to the company by Order in Council of the 24th May, 1886, the portion between Fort Qu'Appelle and the Canadian Pacific Railway to be completed by the 1st November, 1887, and 50 miles a year thereafter.

This Order was amended by an Order of the 7th of July, 1887, the company being allowed one year from the 1st of January, 1887, for the completion of the first 50 mile section (after completion by the 1st of November, 1887, of the portion between the Canadian Pacific Railway and Fort Qu'Appelle), the rate of completion to be 50 miles each year subsequently until completion of the road.

By a further amending Order in Council of the 22nd of November, 1887, the Company have been granted an extension of time for the completion of the portion between Fort Qu'Appelle and the Canadian Pacific Railway, namely, up to the 31st of July, 1888; 100 miles of the road to be completed and in operation by the 31st of December, 1888, as required by the preceding Order.

NORTHUMBERLAND STRAITS TUNNEL SURVEY.

A scheme having been submitted to the Government for the construction of a subway under the Straits of Northumberland to connect the railway systems of New Brunswick and Prince Edward Island, it was considered advisable, before arriving
 [1888] lxxvii

at a decision on a matter of such importance, that the Government should obtain from its own engineers information as to the feasibility of the plan. An Order in Council was passed on the 24th of August, 1886, under which a limited expenditure was authorized in order that subaqueous borings might be taken, covering the distance between Cape Traverse, on the Island, and Cape Tormentine, on the mainland, a distance of eight miles.

The engineers employed succeeded in making borings at a quarter of a mile for the first three miles, starting from Cape Traverse, and at each half mile for the balance. On the first $5\frac{1}{2}$ miles the boring tool passed through sand and gravel until brick clay was reached. From the $5\frac{1}{2}$ mile to the $6\frac{1}{4}$, through sand and hard grey sand to brick clay. From the $6\frac{1}{4}$ to the 8th mile, namely, to the shore line of the main land, through mud, sand and red clay to rock. The deepest water is 96 feet at $4\frac{1}{2}$ miles from the Cape Traverse wharf, and at the $6\frac{1}{2}$ mile a rocky reef occurs, covered by 9 feet of water and about 10 feet of sand. With this exception the bottom is very uniform and satisfactory.

ST. CLAIR RIVER TUNNEL.

In the year 1884, a company, "the St. Clair Frontier Tunnel Company," was incorporated by the Dominion Act, 47 Vic., ch. 82, for the purpose of building a tunnel for railway passage under the River St. Clair, from a point in or near the town of Sarnia, Ontario, to the city of Port Huron, Michigan, U.S., the Act providing that the plans of the tunnel and its works should be approved by the Governor in Council prior to commencement.

Satisfactory plans having been submitted, they were approved by an Order in Council, dated the 24th of November, 1886.

The length of the actual tunnel will be 5,280 feet, or one mile, of which 2,310 feet will be under the river. For the centre portion of this distance, 1,500 feet will, practically, be on the level; the ascent from the centre on either side being 1 in 50. The total length of the tunnel and its approaches will be 15,150 feet, and it will make connection between the Grand Trunk Railway and the Chicago and Grand Trunk Railway. The tunnel, cylindrical in form, will have a diameter of 20 feet in the clear. It will be lined with cast iron. The greatest depth of water over the top of the work will be $40\frac{1}{2}$ feet, and the minimum, 15 feet. The machinery is all in position, and the works are in active progress.

ROYAL COMMISSION ON RAILWAYS.

As the issue of discussion in Parliament upon the question of the expediency of constituting a Court of Railway Commissioners for Canada, and with the object of obtaining reliable information, which would serve as a guide to decision in the matter, a Royal Commission was appointed by an Order in Council of the 6th of July, 1886, and conducted enquiries in various localities interested. The Commissioners presented their report under date the 14th of January, 1888, and the information and conclusions arrived at formed a valuable basis in the preparation of the draft of the Railway Act, which was approved and enacted at the last Session of Parliament.

CANALS.

The canal systems of the Dominion, under Government control, in connection with lakes and navigable rivers, are as follows :

1. The River St. Lawrence and Lakes.
2. The River Ottawa.
3. The Rideau Navigation, from Ottawa to Kingston.
4. The Trent Navigation.
5. The River Richelieu, from the St. Lawrence to Lake Champlain.
6. St. Peter's Canal, Bras d'Or Lake, Nova Scotia.

The collection of the revenue derivable from the canals of the Dominion being in the hands of the Department of Inland Revenue, reference must be had to the annual report of that Department for all information in relation to the subject. The report in question further deals with general matters relating to the movement of freight on these canals.

The following statement, showing the amount accrued on each canal, for canal revenue proper and hydraulic rents, etc., during the fiscal year ended the 30th of June, 1888, has been furnished by the Department of Inland Revenue :

Name of Canal.	Tolls.	Wharfage and Storage.	Fines and Dawages.	Other Receipts.	Hydraulic Rents.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Welland	154,332 91	.....	312 00	.....	5,331 52	159,976 43
St. Lawrence.....	60,592 54	4,349 34	73 00	15,171 93	23,634 21	103,821 02
Chambly	21,935 37	20 00	50 70	.....	240 00	22,246 07
Ottawa.....	54,276 31	.....	149 20	.....	46 00	54,471 51
Rideau.....	5,765 87	13 59	56 43	87 00	1,641 75	7,564 64
Newcastle District.....	319 92	.....	.....	.....	.....	319 92
St. Peter's.....	2,793 82	.....	.....	.....	.....	2,793 82
	300,016 74	4,382 93	641 33	15,258 93	30,893 48	351,193 41

RIVER ST. LAWRENCE AND LAKES.

The River St. Lawrence, with the system of canals established on its course above Montreal, and the Lakes Ontario, Erie, St. Clair, Huron and Superior, with connecting canals, afford a course of water communication extending from the Straits of Belle-Ile to Port Arthur, at the head of Lake Superior, a distance of 2,260 statute

miles. The distance to Duluth is 2,384 miles (A table giving the intermediate distances will be found in Appendix No. 18, p. 149.)

The difference in level between Lake Superior and the point on the St. Lawrence near to Three Rivers, where tidal influence ceases, is about 600 feet.

The Dominion canals, constructed between Montreal and Lake Erie, are the Lachine, Beauharnois, Cornwall, Farran's Point, Rapide Plat, Galops and Welland. Their aggregate length is $70\frac{1}{2}$ miles; total lockage (or height directly overcome by locks) is $533\frac{1}{2}$ feet; number of locks, 53.

Communication between Lakes Huron and Superior is obtained by means of the Sault Ste. Marie Canal, situated on the United States side of the river.

The canal is a little over a mile in length, and has one lock, the dimensions being:—length 515 feet, width 80 feet, with 16 feet of water on the sills, and a lift of about 13 feet.*

Steps have been taken by the Dominion Government for the construction of a lock and canal on the Canadian side, a general description of which will be found further on in the present report, page 99.

In 1841, as was observed in the report presented last year, at the time when the system of canals between Montreal and Lake Ontario was designed, it was in contemplation to afford a depth, at all stages of the St. Lawrence waters, of 9 feet, a depth seemingly, from the data then possessed, secured through the works proposed. The River St. Lawrence is, however, from various causes, subject to fluctuations, the extent of which it was impossible, at the time when these canals were originally constructed, to arrive at with precision, and the continued observations and experience of subsequent years have shown that while the intermediate river reaches, at all times, afford ample depth for vessels of 9 feet draught, in the canals themselves, at certain periods of low water, this depth cannot be maintained, the bottom not having been sunk to a sufficiently low level.

The following list shows the least depth of water on the sills of the locks of the St. Lawrence Canals at a time of exceptionally low water, in the year 1872 (*vide* report of Chief Engineer, 1880) :—

* From the report of the Chief Engineers, U. S. army dated the 1st of October 1888, for the fiscal year ended the 30th June, 1888, it appears that the construction of a new and still larger lock is in progress, taking the site occupied by the two old locks built in 1855, the canal itself being deepened to correspond. The dimensions of the proposed lock will be,—length 800 feet, width 100 feet, with 21 feet of water on the sills: the estimated cost of this new lock and work of canal deepening is set down as \$4,738,865. For this work an appropriation of \$350,000 was made by Congress in August, 1888, and a further appropriation of \$1,000,000 in August, 1888.

From the same report and its appendices it appears that during the fiscal year ended the 30th of June, 1888 the canal was open for 210 days; that 8,823 vessels, etc. passed through, carrying 5,581,169 tons of freight, and 29,494 passengers, the number of lockages being 3,940.

	Feet.	Inches.
Williamsburgh Canals—		
Rapide Plat, guard lock.....	6	7
“ “ lower entrance.....	7	0
Galops, Guard lock	8	1
Iroquois, lower entrance.....	9	3
Farran's Point.....	7	9
Cornwall, guard.....	8	3
“ lower entrance.....	9	0
Beauharnois.....	10	10
“ lower entrance.....	9	3

In the year 1871 it was decided to enlarge the canals on the St. Lawrence route so as to afford a navigable depth of 12 feet throughout. Subsequently, however, it was decided that the depth should ultimately be increased so as to accommodate vessels of 14 feet draught; and accordingly in the scheme of enlargement which has so far been carried out, while, at present, a channel-way in the canals is provided for vessels drawing 12 feet only, all permanent structures, locks, bridges, &c., are being built of such proportions as to accommodate vessels of 14 feet draught, the locks being 270 feet long between the gates, 45 feet in width, and with a clear depth of 14 feet of water on the sills.

In view of the interest now being taken in the question of the completion of the scheme of enlarging the St. Lawrence Canals, the following brief resumé of matters treated more at length further on, under their proper headings, may be of some use as indicating the works of canal enlargement for a fourteen feet navigation so far executed, and those remaining untouched:—

Lachine Canal.—This canal is completed for a twelve feet navigation, with locks, bridges and culverts adapted for a fourteen feet navigation. The untouched work consists of the excavation of the canal prism to a further depth of two feet for about six out of the eight and a half miles comprising the canal. About one half of this excavation would be rock. No work has been carried on during the past year for the deepening of this canal.

Beauharnois Canal.—No enlargement works whatever have been commenced on this canal, but examinations are in progress.

Cornwall Canal.—Here, out of the six new locks required, two locks have been built at the lower end, and are in use, the remaining four, together with the work of enlarging and deepening the entire canal for a fourteen feet navigation, are now under contract. Out of the eleven and a half miles comprising this canal about ten and a half have a navigable depth of nine feet only.

Williamsburg Canals:—

Farran's Point.—No work has been done here. The canal is three-quarters of a mile long, with one lock, the navigable depth being nine feet.

Rapide Plat.—One new lock is completed and in use, leaving one yet to be dealt with. Of the prism of the canal, four miles long, about three quarters of a mile is completed to the requisite depth for a 14 feet navigation.

Galops Canal.—The approach to the upper entrance has been improved, and a new guard lock and lift lock from the river below the rapids at a point connecting the upper entrance with the deep water channel, are under contract.

Welland canal.—The whole of the works, including excavation throughout, are completed, and the present depth of water on the canal accommodates vessels drawing 14 feet.

Besides the above, the channel way of the River St. Lawrence, itself, offers, in parts, obstacles to a fourteen feet navigation which it would be necessary to remove. Of this work, progress has been made with a certain portion, and that the most difficult and in the shallowest section of the river, namely at the Galops Rapids, through which a channel giving safe passage to vessels drawing fourteen feet is now completed. From Cornwall down through Lake St. Francis a channel of sufficient depth for a 14 foot navigation already exists, the improvement of which at a few points, if considered desirable, can be effected at small cost.

LACHINE CANAL.

	Old Line.	New Line.
Length of Canal.....	8½ statute miles.	8½ statute miles.
Number of locks	5	5
Dimensions of locks.....	200 feet by 45 feet.	270 feet by 45 feet.
Total rise or lockage.	45 “	45 “
Depth of water {	at two locks 16 “	18 “
	at three locks.... 9 “	14 “
Mean width of new canal...		150 “

The depth of prism of canal between locks is adapted to vessels of 12 feet draught.

The canal now consists of one channel, with two distinct systems of locks, the old and the enlarged. There are two entrances at each end.

The new canal having been extended for some distance above the entrance of the old canal, the total rise has been increased from 44½ to 45 feet.

This canal extends from the City of Montreal to the Village of Lachine, overcoming the St. Louis Rapids, the first of the series of rapids which bars the ascent of the River St. Lawrence. They are 986 miles distant from the Straits of Belle-Ile.

The full scheme for the enlargement of this, in common with the other canals of the St. Lawrence, contemplated the affording a navigable depth of 14 feet throughout; the improvement immediately in view, however, was only intended to furnish a navigable depth of 12 feet in the canal proper, and accordingly, on the following reaches, namely, between Lachine and Côte St. Paul, Côte St. Paul and St. Gabriel, and between St. Gabriel and Wellington Basin, the channel has been adapted to navigation by vessels of 12 feet draught only. All permanent works on the canal, such as locks, bridges, sidewalls, and culverts have been built to afford a navigable depth of 14 feet. Through Lake St. Louis down to the Lachine Canal—a distance of about

15 miles—the existing channel, which is wide and deep, would be available for about 11 miles. Over the lower four miles, however, the channel will require to be deepened and widened at a number of places.

The canal was closed on the 30th of November, 1887, and opened on the 1st May, 1888.

No detention to vessels occurred during the year, nor was any damage caused to the works. During the winter months the lowness of the water in Lake St. Louis rendered it necessary for the protection of the canal works to curtail the operations of the mills and factories deriving their power from the canal. The works have been maintained in a state of thorough efficiency.

The report of the Superintending Engineer gives details of the repairs and new works executed, and shows generally the condition of the canal. (App. 8, p. 100.)

BEAUHARNOIS CANAL.

Length of canal.....	11½ statute miles.
Number of locks.....	9
Dimensions of locks.....	200 feet by 45 feet.
Total rise or lockage.....	82½ feet.
Depth of water on sills.....	9 “
Breadth of canal on bottom.....	80 “
Breadth of canal at water surface.....	120 “

This canal commences on the south side of the St. Lawrence, 15½ miles from the head of the Lachine Canal. It connects Lakes St. Louis and St. Francis, and passes the three rapids known respectively as the Cascades, the Cedars, and the Coteau.

The canal was closed on the 1st of December, 1887, and was re-opened for traffic on the 1st of May, 1888.

No accident or interruption to navigation occurred during the year. (See App. 8, p. 102.)

Nothing has been done towards the enlargement of this canal.

CORNWALL CANAL.

Length of canal.....	11½ statute miles.
Number of locks.....	6
Dimensions of locks (four).....	200 feet by 45 feet.
“ of two lower entrance locks.....	270 “ by 45 “
Total rise or lockage.....	48 feet.
Depth of water on sills.....	9 “
“ “ at the two lower entrance locks..	14 “
Breadth of canal at bottom (except at two culverts).....	100 “
Breadth of canal at water surface.....	150 “

From the head of the Beauharnois to the foot of the Cornwall Canal, there is a navigable stretch through Lake St. Francis of $32\frac{3}{4}$ miles.

The Cornwall Canal extends past the Long Sault Rapids.

This canal was closed on the 4th December, 1887, and re-opened on the 2nd of May, 1888. (See App. 10, p. 110.)

The canal was in good working order up to the close of the fiscal year. On the evening of the 11th of October, 1888, a serious break occurred in the south bank of this canal between MilleRoches and Moulinette, the breach made being of a mean length of about 300 feet. The re-formation of the bank proved to be a matter of considerable difficulty and cost, owing not only to the extent of the damage done but to the exceptionally wet character of the weather, which retarded operations. The navigation was, in consequence, delayed for about five weeks. Though made good sufficiently to admit of the re-opening of the canal for navigation before the close of the season, the bank requires and will receive further strengthening during the present winter.

NEW WORKS.

The two locks at the new lower entrance (taking the place of three on the old line), were in constant use during the season of navigation. The dimensions of the new locks are those of the general enlargement scheme, namely: Length, 270 feet; breadth, 45 feet; depth of water, 14 feet. The basin between these two locks is 825 feet long.

The four locks still to be dealt with, are all under contract, together with supply weirs and bridges; also the work of deepening and enlarging the prism of the canal.

The proposed channel will be sunk to such depth as to admit of the passage of vessels of 14 feet draught.

WILLIAMSBURGH CANALS.

The Farran's Point, Rapide Plat, and Galops Canals are collectively known as the Williamburgh Canals.

These canals were closed on the 5th of December, 1887, and re-opened on the 21st of May, 1888.

They were operated without interruption to navigation throughout the season, though the lowness of the water in the St. Lawrence during the earlier part made it difficult to maintain the canal at its proper depth. (See Appendix 11, p. 119.)

A statement showing the highest and lowest depth of water at the locks on these canals will be found in Appendix 11, p. 120.

FARRAN'S POINT CANAL.

Length of canal.....	$\frac{3}{4}$ mile.
Number of locks.....	1
Dimensions of lock.....	200 feet by 45 feet.
Total rise, or lockage.....	4 feet.
Depth of water on sills at ordinary water level.....	9 "
Breadth of canal at bottom.....	50 "
Breadth of canal on water surface.....	90 "

From the head of the Cornwall Canal to the foot of Farran's Point Canal the distance on the River St. Lawrence is 5 miles. The latter canal enables vessels ascending the river to avoid the Farran's Point Rapid. Descending vessels run the rapids with ease and safety.

No steps have been taken for the enlargement of this canal.

RAPIDE PLAT CANAL.

Length of canal.....	4
Number of locks.....	2
Dimensions of locks.....	200 feet by 45 feet.
Total rise, or lockage.....	11 $\frac{1}{2}$ feet.
Depth of water on sills.....	9 "
Breadth of canal at bottom.....	50 "
Breadth of canal at surface of water.....	90 "

From the head of Farran's Point Canal to the foot of Rapide Plat Canal there is a navigable stretch of 10 $\frac{1}{2}$ miles. This canal was formed to enable vessels ascending the river to pass the rapid at that place. Descending vessels run the rapid safely.

NEW WORKS.

The enlargement of this canal in conformity with the proportions of the general scheme has been commenced. The works consist of the enlargement of the channel way above and for some distance below the present guard lock at the head of the canal, and the construction of a new lock and a supply weir in connection with the old lock. The bottom of the channel, for a distance of about 1,000 feet below, and out into deep water, above the lock, about 700 feet, has been excavated to an extent sufficient to afford a navigable depth of 14 feet. The new lock is completed and in operation and the remaining works in that connection are well advanced. Arrangements are in progress for the enlargement of the lower portion of the canal, consisting of the prism and lock at the canal outlet.

GALOPS CANAL.

Length of canal.....	7 $\frac{5}{8}$ miles.
Number of locks.....	3
Dimensions of locks.....	200 feet by 45 feet.
Total rise, or lockage.....	15 $\frac{3}{4}$ feet.
Depth of water on sills.....	9 "
Breadth of canal at bottom.....	50 "
Breadth of canal at surface of water.....	90 "

From the head of Rapide Plat Canal to Iroquois, at the foot of the Galops Canal, the St. Lawrence is navigable for $4\frac{1}{2}$ miles. This canal enables vessels to overcome the rapids at Pointe aux Iroquois, Pointe Cardinal and the Galops.

NEW WORKS.

The work under contract was the excavation and deepening of a channel way at the upper end leading to deep water, so as to give a depth available for vessels of 14 feet draught. The work is completed, and consequently access to this canal is found to be greatly facilitated. The extension of the 14 feet navigation down to deep water below the rapids, placing a guard lock at that point, and also a lift lock to the river remain to be done. These works are under contract.

GALOPS RAPIDS IMPROVEMENT.

The Galops Rapids, about seven miles below Prescott, the most shallow of the three passed by the Galops Canal, have been improved for purposes of navigation by certain works of submarine blasting and dredging.

These works, commenced in 1880, consist of the excavation of a straight channel through the rapids, 3,300 feet long, 200 feet wide, and of such depth as to afford safe passage at low water to vessels of 14 feet draught. This implies affording a depth of 17 feet of water.

The whole of these works have been completed, and the leading marks and beacons will be put in position in readiness for the season of 1889.

WELLAND CANAL.

MAIN LINE, FROM PORT DALHOUSIE, LAKE ONTARIO, TO PORT COLBORNE,

LAKE ERIE.

By the works of enlargement, passage is now afforded, at all stages of the Lake Erie level, to vessels drawing 14 feet of water.

	Old line.	Enlarged or New Line.
Length of Canal	$27\frac{1}{2}$ miles.	$26\frac{3}{4}$ miles.
Pairs of guard gates (formerly 3).....		2
Number of locks { lift	26	} lift 25 } guard 1
{ guard.....	1	
Dimensions.....	1 lock 200 x 45 1 " 200 x 45 1 (tidal) 230 x 45 24 150 x $26\frac{1}{2}$	} 270 feet x 45 feet.
Total rise or lockage.....	$326\frac{3}{4}$ feet.		$326\frac{3}{4}$ feet.
Depth of water on sills.....	$10\frac{1}{2}$ "	14 "

WELLAND RIVER BRANCHES.

Length of Canal—Port Robinson Cut to River Welland.....	2,622 feet.
“ From the Canal at Welland to the river, <i>via</i> lock at aqueduct	300 “
“ Chippewa Cut to River Niagara	1,020 “
Number of locks—One at aqueduct and one at Port Robinson.....	2 “
Dimensions of locks.....	150 by 26½ feet.
Total lockage from the Canal at Welland down to River Welland.....	10 feet.
Depth of water on sills.....	9 “ 10 inches.

GRAND RIVER FEEDER.

Length of canal.....	21 miles.
Number of locks.....	2
Dimensions of locks.....	{ 1 of 150 by 26½ feet. 1 of 200 by 45 “
Total rise, or lockage.....	7 to 8 feet.
Depth of water on sills.....	9 feet.

PORT MAITLAND BRANCH.

Length of canal.....	1¼ miles.
Number of locks.....	1
Dimension of locks.....	185 by 45 feet.
Total rise, or lockage.....	7½ feet.
Depth of water on sills	11 “

The Welland Canal has one entrance from Lake Ontario, at Port Dalhousie, serving for both the old and new canals, and two from Lake Erie, of which one is for the main line at Port Colborne, and one for the feeder route at Port Maitland; it has also an entrance from the River Niagara, at the town of Chippewa. The enlarged route lies between Port Dalhousie and Port Colborne.

From Port Dalhousie to Allanburgh, 11¼ miles, there are now two distinct lines of canal in operation, the old line and the enlarged, or new line.

From Allanburgh to Port Colborne, a distance of 15 miles, there is only one channel, the old canal having been enlarged.

The canals were closed on the 5th of December, 1837, and re-opened on the 1st of May, 1838.

On pages 137 and 138 tables will be found giving the greatest and least depth of water on the mitre sills of both the new and old locks at Port Dalhousie and Port Colborne. Also, a comparative statement showing the average height of water at both places in the months of June, 1837 and 1838. From this it appears that the average height of water on the new lock at Port Dalhousie, was 17 feet 10 inches, while in 1838 it was 16 feet 2½ inches, and for the new lock at Port Colborne 16 feet 6 inches in 1837, and 15 feet 5½ inches in 1838.

[1838]

Lxxxvii

NEW CANAL.

No accident of importance has occurred during the year.

Full details of the various repairs, renewals, &c., executed during the year, will be found in the report of the Superintendent. (App. 12, p. 122.)

OLD CANAL AND FEEDER.

The necessary repairs and renewals of the year have been made, and the works have been maintained in good condition. (App. 12, p. 129.)

It may be observed that in making renewals to certain pier works at the Port Dalhousie entrance, the Chief Engineer of Canals has substituted for the timber formerly used, concrete work, the durability of which more than compensates for the extra first cost.

MONTREAL, OTTAWA AND KINGSTON.

This route extends from the Harbour of Montreal to the Port of Kingston, passing through the Lachine Canal, the navigation sections of the lower River Ottawa, and the Ottawa River Canals, to the City of Ottawa, thence by the River Rideau and the Rideau Canal to Kingston, on Lake Ontario—a total distance of 245½ miles.

After leaving the Lachine Canal, the works constructed to overcome the difficulties of navigation are:—

The St. Anne's Lock ;	}	Ottawa River Canals.
Carillon Canal ;		
Grenville Canal ;		
Rideau Canal ;		

The total lockage (not including that of the Lachine Canal), is 509 feet—(345 rise, 164 fall)—and the number of locks is 55.

The following table exhibits the intermediate distance from Montreal Harbour:—

Sections of Navigation.	Intermediate distance.	Total distance from Montreal.
	Miles.	Miles.
The Lachine Canal.....	8½	
From Lachine to Ste. Anne's Lock.....	15	23½
Ste. Anne's Lock and Piers.....	1⅛	23⅞
From Ste. Anne's Lock to Carillon Canal.....	27	50⅞
The Carillon Canal.....	3¼	51⅞
From Carillon Canal to Grenville Canal.....	6¼	57⅞
The Grenville Canal.....	6¾	63⅞
From the Grenville Canal to entrance Rideau Navigation.....	56	119⅞
Rideau Navigation, ending at Kingston.....	126¼	245⅞

STE. ANNE'S LOCK.

	Old Lock.	New Lock.
Length of canal.....	$\frac{1}{2}$ mile.	$\frac{1}{8}$ mile.
Number of locks.....	1	1
Dimensions of lock.....	190 by 45 feet.	200 by 45 feet.
Total rise, or lockage.....	3 feet.	3 feet.
Depth of water on sills.....	6 "	9 "

This work, with guide piers above and below, surmounts the Ste. Anne's Rapids between Ile Perrot and the head of the Island of Montreal, at the outlet of that portion of the Ottawa River which forms the Lake of Two Mountains, $23\frac{1}{2}$ miles from Montreal Harbour.

This lock was closed to navigation on the 28th November, 1887, and re-opened on the 2nd of May, 1888.

Navigation has been conducted without interruption or accident during the year.

Both the old and the new locks are available. (App. 9, p. 116.)

THE CARILLON CANAL.

Length of canal.....	$\frac{3}{4}$ mile.
Number of locks.....	2
Dimensions of locks.....	200 by 45 feet.
Total rise, or lockage.....	16 feet.
Depth of water on sills.....	9 "
Breadth of canal at bottom.....	100 "
Breadth of canal at water surface.....	110 "

This canal overcomes the Carillon Rapids.

From Ste. Anne's Lock to the foot of the Carillon Canal there is a navigable stretch of 27 miles, through the Lake of Two Mountains and the River Ottawa.

The canal was closed on the 30th of November, 1887, and re-opened on the 2nd of May, 1888.

No interruption to traffic has taken place. (App. 9, p. 116)

By the construction of the Carillon dam, the water at that point has been raised 9 feet. Above this point, for a distance of nearly 7 miles, as far as the foot of Grenville Canal, the level of the river has been raised, and, consequently, the depth of water on the lower sill of the entrance lock of that canal has been increased, and the necessity of using the Chute à Blondeau Canal, situated between these points, is obviated.

GRENVILLE CANAL.

Length of canal.....	5 $\frac{3}{4}$ miles.
Number of locks.....	5
Dimensions of locks.....	200 feet by 45 feet.
Total rise or lockage.....	43 $\frac{3}{4}$ "
Depth of water on sills.....	9 "
Breadth of canal at bottom	40 to 50 feet.
Breadth of canal at surface of water.....	50 to 80 feet.

From the head of the Carillon Canal to the foot of the Grenville Canal, there is a navigable stretch of 5 $\frac{1}{2}$ miles.

This canal, by which the Long Sault Rapids are avoided, is about 56 miles below the city of Ottawa.

The canal was closed on the 30th of November, 1887, and re-opened on the 2nd of May, 1888.

(See App. 9, p. 116.)

UPPER OTTAWA RIVER.

CULBUTE LOCKS AND DAMS.

Number of locks.....	2
Dimension of locks.....	200 by 45 feet.
Total rise, or lockage.....	18 to 20 "
Depth of water on sills.....	5 "
Aggregate length of dams.....	625 "

From the Grenville Canal to the city of Ottawa, a distance of about 56 miles, the river is navigable. Beyond the city, for a distance of 107 miles, to L'Islet or Culbute, continuous navigation is rendered impracticable by the undermentioned rapids :—

The Chaudière, the Descheness, the Chats, the Chenaux, the Portage du Fort and the Grand Calumet.

The Culbute works, situated at L'Islet, surmount the Culbute and L'Islet Rapids on the north channel of the Ottawa.

These works comprise two locks and three continuous dams, all built of wood. The dams reduce the rapids to smooth water, enabling the river to be navigated from the head of the locks to Des Joachims, a distance of 37 miles.

There is a navigation route of 80 miles with a minimum depth of 7 feet at extreme low water, between Des Joachims and Bryson; making a total above and below Culbute of 117 miles. (App. 9, p. 117.)

RIDEAU NAVIGATION.

The Rideau system connects the River Ottawa, at the city of Ottawa, with the eastern end of Lake Ontario, at Kingston.

Length of navigation waters.....	126 $\frac{1}{4}$ miles.
Number of locks going from Ottawa to Kingston.	{ 33 ascending 14 descending.
Total lockage..... 446 $\frac{1}{4}$	{ 282 $\frac{1}{4}$ rise and 164 fall. } at high water.
Dimensions of locks.....	134 by 33 feet.
Depth of water on sills, 5 feet; navigable depth through the several reaches.....	4 $\frac{1}{2}$ feet.
Breadth of canal reaches at bottom.....	{ 60 " in earth. 54 " in rock.
Breadth at surface of water.....	80 " in earth.

The summit level of this system is at Upper Lake Rideau, but several of the descending reaches are also supplied by waters which have been made tributary to them. The following description gives the sources of supply :

From the summit, the route towards Ottawa follows the River Rideau, and that towards Kingston follows the River Cataraqui. The whole duty of keeping up the water to its proper level is effected by the reserves, given in detail below.

These may be divided into three systems, viz:—

1. The summit level, supplied by the Wolfe Lake system. 2. The eastern descending level to Ottawa, supplied by the River Tay system, discharging into Lake Rideau. 3. The south west descending level to Kingston, supplied by the Mud Lake system, formerly known as the Devil Lake system, discharging into Lake Openacon.

Lake Openacon receives the waters of Buck Lake and Rock Lake.

All these waters on the descending level, supplemented by those of Lake Loughboro', flow into Cranberry Lake, which, discharging through Round Tail outlet, forms the River Cataraqui. This river, rendered navigable by dams at various points, affords a line of navigation to Kingston.

The navigation stopped at Ottawa and at Kingston Mills on the 25th November, 1887, and recommenced on the 3rd of May, 1888.

Navigation throughout the year was uninterrupted.

The traffic of the canal shows increase.

Continued drought produced lowness of water in the canal, but the level of the water in the descending reaches from the summit level to Ottawa, was maintained up to the close of navigation, at the full height required. On the descending reaches, however, from the summit level towards Kingston, the water fell below navigation height, which is 5 feet 10 inches, namely, at Newboro, the first descending lock, by the first week of September, until the close of navigation when there were only 4 feet 6 inches of water on the lock sill, and on the Kingston Mills reach by the 8th of August when there were only 4 feet 1 inch of water on the upper sill. The snow fall at this end was light, and the reserve lakes consequently failed to give the water supply required. The spring freshets on the Rideau were of no importance.

In 1885 Parliament voted the sum of \$20,000 "for works necessary to increase the supply of water to the canal and the Gananoque River." In pursuance of the objects of this vote, arrangements were authorized by an Order in Council of the 16th of November, 1885, by which the Gananoque Water Power Company undertook the execution of works raising the water-level of that river, receiving from the Government the sum of \$8,000 towards the cost to be incurred. The Company have completed their portion of the works as agreed upon. (App. 13, p. 139.)

TAY CANAL.

This canal, is a branch of the Rideau Canal, affording communication between Beveridge's Bay, on Lake Rideau, and the town of Perth, a distance of about 6 miles.

The works, embracing the construction of a dam and two locks, 134 feet by 32 feet, with a depth, at the lowest stage of water, of 5 feet 6 inches, also the deepening of the channel of the River Tay, where required, and the cutting of a canal from Lake Rideau to the River Tay, a distance of about $1\frac{1}{4}$ mile, are completed, giving communication to the town of Perth by way of the river. Basins and bridges are now being constructed in the town in connection with the canal. (App. 14, p. 142.)

RICHELIEU AND LAKE CHAMPLAIN.

This system, commencing at Sorel, at the confluence of the Rivers St. Lawrence and Richelieu, 46 miles below Montreal, extends along the River Richelieu through the St. Ours Lock to the Basin of Chambly, thence by the Chambly Canal to St. Johns and the River Richelieu, to Lake Champlain. The distance from Sorel to the boundary line is 81 miles.

At Whitehall, the southern end of Lake Champlain, the Champlain Canal is entered, and connection is obtained with the River Hudson, by which the city of New York is directly reached. From the boundary line to New York the distance is 330 miles.

The following table shows the distance between Sorel and New York :—

Sections of Navigation.	Intermediate distance in miles.	Total distances.
Sorel to St. Ours Lock.....	14	14
St. Ours Lock to Chambly Canal.....	32	46
Chambly Canal.....	12	58
Chambly Canal to Boundary Line.....	23	81
Boundary Line to Champlain Canal.....	111	192
Champlain Canal to Junction with Erie Canal.....	66	258
Erie Canal from Junction to Albany.....	7	265
Albany to New York.....	146	411

ST. OURS LOCK AND DAM.

Length of canal.....	$\frac{1}{2}$ mile.
Number of locks.....	1
Dimensions of lock.....	200 feet by 45 feet.
Total rise, or lockage.....	5 "
Depth of water on sills.....	7 " at low water.
Length of dam in eastern channel.....	300 "
" " western channel.....	690 "

At St. Ours, fourteen miles from Sorel, the River Richelieu is divided by a small island into two channels. The St. Ours Lock is in the eastern channel.

There is a navigable depth of 7 feet between St. Ours Lock and Chambly Basin, a distance of thirty-two miles.

Navigation closed on the 25th of November, 1887, and re-opened on the 19th of April, 1888.

This lock, which was constructed in 1849, and has for some years been in bad condition is being thoroughly repaired. (See appendix 8, p. 109.)

CHAMBLY CANAL.

Length of canal.....	12 miles
Number of locks.....	9 "

Dimensions of locks:—

Guard Lock, No. 1, at St. Johns.....	122 feet	} From 22½ to 24 feet wide.
Lift “ “ 2.....	124 “	
“ “ “ 3, 4, 5, 6.....	118 “	
“ “ “ 7, 8, 9 combined.....	125 “	
Total rise, or lockage.....	74 “	
Depth of water on sills.....	7 “	
Breadth of canal at bottom.....	36 “	
“ “ surface of water.....	60 “	

Succeeding the 32 miles of navigable water between St. Ours Lock and Chambly Basin—a natural reservoir formed by the expansion of the River Richelieu—is the Chambly Canal, which overcomes the rapids between Chambly and St. Johns, a distance of 12 miles.

This canal was closed to navigation on the 1st of December, 1887, and was re-opened on the 8th of May, 1888.

Navigation was conducted without accident; but a detention of three days was caused in September 1887 by the smoke from forest fires and fogs.

Both at Chambly and at St. Johns the entrance piers were extensively damaged by ice in 1886-87. During the past fiscal year the latter has been entirely rebuilt and raised at a cost of \$6,000.

Owing to the unprecedentedly high water in the spring of 1887, on the River Richelieu, the canal bank between St. Johns and Ile Ste. Thérèse was partly washed away, the damage extending over a distance of three miles. Measures have been taken for the repair of the work and the raising of the banks: work to the value of \$10,636 having been executed during the year.

Portions of Locks Nos 1, 3, 4, and 6 have been rebuilt at a cost of \$35,000.

The appropriations of all of the above works of repair and improvement have been charged against Income. A new steam dredge and scows have been constructed for service on the lower division of the St Lawrence canals, the cost being \$19,240. (See App. 8, p. 10 4.)

RIVER RICHELIEU.

The work of surveying the River Richelieu between St. Johns and Rouse's Point was continued during the year. The whole of the hydrographic survey of the River between the points named has now been completed, and maps and a chart of the River have been made. (See pages 109 and 115.)

ST. PETER'S CANAL, CAPE BRETON.

Length of canal.....	about 2,400 feet.
Breadth at water line.....	55 feet.
Lock.....	one tidal lock, 4 pairs of gates.
Dimensions	200 feet by 48 feet.
Depth of water on sills.....	18 feet at lowest water.
Depth through canal.....	19 "
Extreme rise and fall of tide in St. Peter's Bay.....	4 "

This canal connects St. Peter's Bay, on the southern side of Cape Breton, Nova Scotia, with the Bras d'Or Lakes. It crosses an isthmus half a mile in width, and gives access from the Atlantic.

Navigation was closed on the 7th of January 1888, and re-opened on the 8th of April, 1888.

The works of the canal are in good order, with the exception of the retaining wall of the western side of the canal which is in bad condition. The retaining wall at the southern entrance, destroyed by the sea-worm, has been repaired. The traffic returns show the passage of 1194 vessels bound north, and 966 vessels bound south. (Ap. 17, p. 148.)

TRENT RIVER NAVIGATION.

The term "Trent River Navigation" is applied to a series of water stretches, which do not, however, form a connected system of navigation, and which, in their present condition, are efficient only for local use.

This series is composed of a chain of lakes and rivers extending from Trenton, at the mouth of the Trent, on the Bay of Quinté, Lake Ontario, to Lake Huron.

Many years ago the utilizing of these waters for the purpose of through water communication between Lake Huron and Lake Ontario, was projected.

The course in contemplation was as follows : —

Through the River Trent, Rice Lake, the River Otonabee and Lakes Clear, Buckhorn, Chemong, Pigeon, Sturgeon and Cameron to Lake Balsam, the summit water, about 165 miles from Trenton; from Lake Balsam by a canal and the River Talbot to Lake Simcoe; thence by the River Severn to Georgian Bay, Lake Huron, the total distance being about 235 miles.

The execution of this scheme, commenced in 1837, was subsequently deferred. By certain works, however, below specified, sections of these waters were made practicable for navigation and for the passage of timber. A branch of the main course, extending from Sturgeon Lake south, affords communication with the town
[1888]

of Lindsay, and through Lake Scugog to Port Perry, a distance of 190 miles from Trenton.

The following table gives the distance of navigable and unnavigable reaches :

	Navigable Miles.	Unnavigable. Miles.
From Trenton, Bay of Quinté, to Nine Mile Rapids....		9
“ Nine Mile Rapids to Percy Landing	19½	
“ Percy Landing to Heely’s Fall Dam.....		14¼
“ Heeley’s Fall Dam to Peterboro’.....	51¾	
“ Peterboro’ to Lakefield.....		9½
“ Lakefield to a point across Balsam Lake.....	61	
	132¼	32¾
Total distance, Bay of Quinté to Balsam Lake.....		165
From Sturgeon Point on Sturgeon Lake, 43¾ miles from Lakefield, the branch through the town of Lindsay to Port Perry at the head of Lake Scugog.....	27½	

The following is a list of the works :—

MAIN LINE FROM TRENTON TO BALSAM LAKE.

<i>Chisholm’s Rapids.</i>		Distance from Trenton in miles.
The work here consists of a canal and lock, a dam and slide.		15½
<i>Percy Landing.</i>		
A retaining boom for saw logs		28½
<i>Campbellford.</i>		
Guide booms.....		34¾
<i>Middle Falls.</i>		
The work consists of 4 dams and 2 slides.....		37¾
<i>Crow Bay.</i>		
A retaining boom.....		38
<i>Heeley’s Falls.</i>		
A dam and slide.....		42¾
<i>Crook’s Rapids, Hastings.</i>		
The works consist of 1 lock, 1 dam and slide for timber.....		56½
<i>Whitlas’ Rapids.</i>		
The works, situated below Peterboro’, consist of a lock, dam and canal.....		92¾

<i>Peterboro.</i>	
The works consist of 3 piers and 1 boom.....	94
<i>Lakefield.</i>	
The works consist of a dam and wharf	103½
<i>Young's Point.</i>	
One lock (a Provincial Government work) and dam.....	108½
<i>Burleigh.</i>	
Timber slides, 2 dams, 2 locks (new).....	118
<i>Lovesick Rapids.</i>	
One lock and dam	119½
<i>Buckhorn Rapids.</i>	
There is a dam at this point, which is important as keeping up the level of the water of the lakes west of it, as far as Bobcaygeon, including Lakes Pigeon, and Buckhorn Chemong, 1 lock, 1 slide (new works).....	125
<i>Bobcaygeon.</i>	
There are two dams here with canal, lock and slide. These dams retain the waters of the reach as far as Fenelon Falls and Lindsay Lock	140¾
<i>Fenelon Falls.</i>	
A large slide and booms, 2 combined locks (new).....	154¾
<i>Rosedale.</i>	
An old lock maintained by the Ontario Government, giving entrance from Cameron's Lake to Balsam Lake.....	162¾
BRANCH FROM STURGEON LAKE TO LAKE SOUGOG.	
<i>Lindsay.</i>	
One lock, rebuilt by the Government of the Province of Ontario in 1879. Its dimensions are 134 x 33 feet, with 5 feet of water on the sills.....	161½
The navigation is, by this work, extended to Port Perry, Lake Scugog.....	190

The water on the several reaches was maintained at a fair height.

The number of lockages on the several canals was 1,140, as against 1,574 vessels passed during the season of 1836-87.

Navigation ceased on the 25th of November, 1887, and re-opened on 25th of April, 1888.

NEW WORKS,

The new works for the improvement of the Trent Valley navigation, are at the following places :—Canals, with locks and bridges, at Burleigh Rapids, Buckhorn [1888]

Rapids and Fenelon Falls ; also dams at Lakefield and Young's Point. By these works, which are now all completed, there is afforded communication between Lakefield, 9½ miles from Peterboro', and Balsam Lake, the headwaters of the system; opening up a total of about 160 miles of direct and lateral navigation.

At Lakefield, 9½ miles from Peterboro', the new dam, at the head of the Nine Mile Rapids of the River Otonabee, which maintains navigation on Lake Katchewanoe up to Young's Point, was completed during the fiscal year, 1886-87.

At Young's Point, 5 miles from Lakefield, the new dam between Lake Katchewanoe and Clear Lake, controls the water level through Clear and Stony Lakes up to the foot of the Burleigh Canal. The lock here, it should be observed, is controlled by the Provincial Government.

At Burleigh Rapids, 10 miles from Young's Point, a canal is being constructed about 2¼ miles in length, passing the Burleigh and Lovesick Rapids, and giving communication between Stony Lake and Deer Bay. The work, comprising the construction of three lift locks and certain dams, is completed.

At Buckhorn Rapids, 7 miles from Burleigh Rapids, a canal of about one-fourth of a mile long has been constructed, having one lift-lock. The work is completed.

At Bobcaygeon, 15½ miles from Buckhorn Rapids, a new dam, taking the place of two old ones, is in course of construction. By these works the water level is controlled up to Fenelon Falls.

At Fenelon Falls, 15 miles from Bobcaygeon, a canal about one-third of a mile in length, with two lift locks was constructed in 1885 connecting Sturgeon Lake with Cameron Lake.

In all the above named works the locks are of the following dimensions :—

Length.....	134 feet.
Breadth.....	33 "
Depth of water on the mitre sills.....	5 "

(App. 15, p. 143, and App. 16, p. 146.)

MURRAY CANAL.

This canal extends through the Isthmus of Murray, giving connection westward between the headwaters of the Bay of Quinté and Lake Ontario.

The works on this canal, commenced under a contract given out in August, 1882, comprise a cut through the isthmus 4½ miles long, and improvements in the way of dredging and other work to the entrance channels at either end, covering a total distance of 9½ miles in all.

The canal has a depth of 11 feet below the lowest known water level of the lake, or of 12 feet 6 inches below ordinary lake level, and a width at the bottom of 80 feet. There are no locks.

Its western terminus is near the village of Brighton in the harbour of Presqu'île, from which point to Port Dalhousie, the entrance of the Welland Canal, the distance is about 120 miles.

Certain excavation still remains to be done to obtain the full contemplated width, and some bottom rock has to be removed near the Brighton end; the channel way through a part of the harbour is nearly completed. The piers at both the eastern and western entrances of the canal are all completed, also three out of the four bridges required. The new entrance from the Lake to Presqu'île harbour, has a width varying from 1000 feet outside the main light, to 200 feet at the entrance to the channel. The maximum depth is 16 feet.

The whole works will it is expected be completed and the canal open for traffic during the season of 1889.

SAULT STE. MARIE CANAL.

This canal is intended to be constructed on the Canadian side of the River St. Mary between Lakes Huron and Superior, being formed through St Mary's island on the north side of the rapids.

At ordinary stages of the river water there is a difference of 18 feet in the levels of the water above and below this island. The distance across the island is about two thirds of a mile. The canal will have a mean width of 150 feet and a depth of 18 feet below the lowest known water line of that part of the river. The difference in level will be overcome by one lock 600 feet in length and 85 feet in width, having guard gates at both ends facing in opposite directions.

These gates are to be worked by "Hydraulic power," the water being admitted or withdrawn at the floor of the lock.

The works, including both those for the lock and the canal are under contract; also the entrance channels at both ends.

The contracts require the whole to be completed and ready for use in May, 1892.

The canal will be crossed by the railway leading to the Sault St Marie Railway Bridge recently built. The crossing is to be made by a swing bridge of sufficient capacity to span the canal. This is to be constructed and maintained by the company concerned.

ROYAL COMMISSION ON LACHINE CANAL LEASES.

It being desirable, in view of the changed conditions consequent on the enlargement of the Lachine Canal, that an understanding should be had of the position of the several hydraulic leases on the work, a Royal Commission was appointed by an Order in Council dated the 17th of July, 1886, for the purpose of investigating the matter and reporting as to the conclusions arrived at.

The Commissioners conducted their inquiries accordingly, and on the 31st of May, 1887, reported with respect to certain matters in this connection.

COMMISSION ON THE TRENT NAVIGATION.

In view of the interest taken in the scheme for connecting the waters of the Bay of Quinté, Lake Ontario, with those of Georgian Bay, Lake Huron, it was thought advisable that the matter should receive investigation at the present time, and accordingly an Order in Council was passed on the 8th of October, 1887; authorizing the appointment of a Commission of enquiry to examine and report on the question of the expediency of extending the Trent Valley navigation. The Commission was constituted accordingly. It has not yet reported.

I have the honour to be,

Your Excellency's most obedient servant,

J. H. POPE,

Minister of Railways and Canals.

31st December, 1888.

APPENDICES.

APPENDIX No. 1.

STATEMENT showing the amount expended by the Department of Railways and Canals,
Dominion of Canada, during the Fiscal Year ended 30th June, 1888.

Name of Work.	Construction.		Repairs.		Staff and Maintenance.	
	\$	cts.	\$	cts.	\$	cts.
CANALS.						
Lachine.....	19,414	34	19,999	64	52,229	61
do —Income.....	7,996	78				
Cornwall.....	67,945	74	13,933	34	16,947	84
Williamsburgh.....	70,128	29	8,190	13	7,646	79
do —Income.....	1,613	67				
Beauharnois do.....	14,411	97	14,349	49	19,325	05
St. Lawrence.....	56,482	85				
Welland.....	77,052	82	87,309	04	110,806	01
do deepening to 14 feet.....	350,742	87				
do damages.....	2,014	75				
do back ditches—Income.....	661	18				
do weirs and dam, Dunnville—Income.....	8,551	24				
do head gates do.....	1,523	44				
Sault Ste. Marie.....	8,145	06				
St. Anne's.....	18,910	55	1,380	75	2,505	61
do —Income.....	1,372	59				
Carillon.....	1,842	99	10,035	62	21,531	12
Grenville.....	37,153	30				
Oulbuté.....	7,573	99	730	60	739	50
Rideau—Income.....	18,889	48	25,478	87	33,458	83
Trent.....	114,879	35	5,151	42	1,770	29
Murray.....	146,754	37				
St. Ours.....			2,801	17	2,216	04
Chambly—Income.....	65,536	64	11,849	74	20,073	60
St. Peter's.....			1,588	40	3,217	77
Surveys—Income.....	7,368	76				
Arbitrations—Income.....	5,775	43				
Tay.....	54,166	57				
Dredge vessels—Income.....	14,419	60	5,799	83		
Royal Commission—Income.....	2,835	40				
Repairs to Lake St. Francis Road—Income.....	4,133	88				
Total on Canals.....	1,188,302	60	208,599	04	292,468	06
RAILWAYS.						
Pacific.....	52,374	20				
Surveys—Income.....	9,208	50				
Statistics.....	115	69				
Intercolonial.....	742,385	38			3,276,441	61
do Eastern Extension.....					90,954	73
do Windsor Branch.....					24,040	33
Prince Edward Island.....					229,639	95
Subsidies.....	1,027,041	92				
Short Line Railway claims.....	397	35				
Carleton Branch.....	504	17				
Cape Breton.....	689,450	50				
Royal Commission—Income.....	13,574	71				
Carried forward.....						

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

Name of Work.	Construction.		Repairs.		Staff and Maintenance.		
	\$	cts.	\$	cts.	\$	cts.	
Brought forward.....							
RAILWAYS—<i>Concluded.</i>							
Albert Railway Company (Loan)	3,112	13					
Fredericton and St. Mary's Railway Bridge Company (Loan).....	274,947	00					
Oxford and New Glasgow.	280,932	35					
Total on Railways.....	3,094,043	90			3,621,076	62	
Total on Railways and Canals.....	4,282,346	40		208,599	04	3,913,544	68

Total amount expended.....\$8,404,490 12

S. LEONARD SHANNON,
for Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, 31st, December, 1888. ;

APPENDIX

STATEMENT showing the amount expended on the construction and the

(Repairs not

By Whom Expenditure Incurred.	Year ending 30th June.	Lachine Canal.	Beauharnois Canal.
		\$ cts.	\$ cts.
Imperial Government.....	} Up to June 30, 1867 {	40,000 00	.....
Provincial Government.....		2,547,532 85	1,611,424 11
Dominion Government.....	1868	1,852 70	7,008 00
do	1869	2,000 00	55 00
do	1870	.....	587 50
do	1871	12,231 40	187 00
do	1872	36,708 15	27 50
do	1873	42,982 49	5,280 90
do	1874	158,618 35	26 00
do	1875	197,420 52	36 00
do	1876	327,769 39	.....
do	1877	1,439,375 73	.....
do	1878	1,484,619 63	.....
do	1879	958,053 30	.....
do	1880	369,566 74	.....
do	1881	292,165 51	.....
do	1882	252,821 33	.....
do	1883	396,496 96	.....
do	1884	189,034 41	.....
do	1885	111,215 23	.....
do	1886	210,509 42	.....
do	1887	28,772 52	.....
do	1888	19,414 34	.....
Total.....		9,119,160 97	1,624,632 01

No. 2.

enlargement of Canals of the Dominion of Canada, up to 30th June, 1888.

included.)

Cornwall Canal.	St. Lawrence Canals. — Not Apportioned	Williamsburg Canals.	St. Lawrence — Chain Vessel and Improvement of Navigation.	Surveys, St. Lawrence and Canals.	Welland Canal.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
					222,220 00
1,933,152 69	116,821 31	1,320,655 54			7,416,019 83
2,786 00					12,097 84
10,692 04					43,486 36
17,780 05					24,173 72
7 50					47,869 10
10,000 21		1,077 00			59,702 76
1,011 75				35,326 44	130,158 47
				26,541 30	746,420 61
1,780 00				22,811 36	1,046,714 91
			28,500 00	21,715 47	1,570,178 19
49,211 37			28,064 67	19,312 64	2,199,962 61
145,015 45			1,623 76	3,946 70	2,138,392 99
143,092 05		4,580 00		4,685 77	1,552,697 41
109,454 95			623 52	8,591 04	1,252,924 75
53,948 14			6,927 96		1,242,943 37
44,587 61			28,933 45		603,402 17
21,728 93			44,874 31		550,240 36
23,018 13		2,473 44	89,846 03		432,952 88
62,034 90		103,237 12	115,110 17		463,505 38
57,820 83		149,835 71	116,051 73		215,477 75
46,966 43		115,853 00	74,437 31		1,091,073 87
67,945 74		70,128 29	56,482 85		429,810 44
2,802,034 77	116,821 31	1,767,840 10	591,475 76	142,730 72	23,492,425 77

APPENDIX

STATEMENT showing the amount expended on the construction and the
(Repairs not

By whom Expenditure incurred.	Year ending 30th June.	St. Ann's Lock.	Carillon and Grenville Canals.	Culbute Lock.	Rideau Canal.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Imperial Government.....	Up to June 30, 1867.	.....	(*)	.....	3,911,701 47
Provincial Government.....		134,456 51	63,053 64	.....	153,062 60
Dominion Government.....	1868	.....	19,817 22	.....	7,593 67
do	1869	.....	.....	.....	.....
do	1870	.....	4,167 96	.....	.....
do	1871	.....	23,119 37	.....	11,732 88
do	1872	1,939 46	165,257 28	.....	4,967 50
do	1873	540 11	136,250 48	.....	18,070 97
do	1874	12,753 27	245,258 38	38,388 99	5,793 16
do	1875	32,627 71	339,864 76	63,659 29,	9,310 85
do	1876	24,935 85	326,203 16	76,842 44	2,163 96
do	1877	30,003 08	245,738 04	56,081 87	214 11
do	1878	14,618 85	22,676 20	5,933 53	.....
do	1879	22,113 02	243,141 24	20,694 19	7,703 88
do	1880	3,054 68	281,514 27	16,688 20	355 05
do	1881	69,042 76	336,707 53	4,721 62	.....
do	1882	193,158 36	433,084 39	29,567 15	.....
do	1883	172,959 95	416,826 10	14,249 60	.....
do	1884	142,006 25	399,267 16	8,151 16	.....
do	1885	93,679 57	157,187 72	19,071 76	2,098 76
do	1886	129,681 67	104,973 24	26,385 27	.....
do	1887	45,276 08	20,747 11	7,760 88	.....
do	1888	18,910 55	38,996 29	7,573 99	.....
Total.....		1,141,757 73	4,023,851 54	395,769 94	4,134,768 86

*Expenditure not given.

No. 2—Concluded.

enlargement of the Canals of the Dominion of Canada, &c.—Concluded.
included.)

Chambly Canal.	St. Peter's Canal.	Survey Baie Verte Canal	Murray Canal.	Trent Canal.	Tay Canal.	Sault Ste. Marie Canal.	Total.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
							4,173,921 47
643,711 76	88,949 39						16,028,840 23
	21,519 72						72,875 15
	70,719 80						126,953 20
	46,193 57						92,902 80
2,872 85							98,020 10
1,906 49							281,586 26
759 00		4,877 83					375,258 44
		4,018 90					1,237,818 96
2,415 00	20 97	443 00					1,716,901 37
	11,125 00	110 75					2,389,544 21
80 00	63,330 18	22 30					4,131,396 60
	26,511 51						3,843,338 62
	107,337 75						3,064,098 61
	80,120 54						2,122,893 74
	69,434 76	520 00					2,076,411 65
	484 00		7,135 63				1,593,174 09
			84,071 68	40,767 16	4,831 80		1,747,046 85
	2,471 40		118,187 42	120,643 91	50,878 12		1,578,930 32
	16,820 15		148,802 66	121,382 84	92,473 97		1,506,720 23
	2,316 85		179,704 52	75,103 30	65,561 51		1,333,421 80
	1,087 75		142,563 66	179,541 63	49,617 92		1,803,698 16
			146,754 37	114,879 35	54,166 57	8,145 06	1,033,207 84
651,745 01	608,443 34	9,992 78	827,319 95	652,318 19	317,529 89	8,145 06	52,428,783 70

APPENDIX No. 3.

STATEMENT showing Subsidies voted for Railways as to which contracts have been entered into and payments made, up to 30th June, 1888.

Subsidies voted.		Railways.					
Authority.	Amount.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	Total to June 30, 1888.
	\$ cts	\$	\$	\$	\$	\$ cts.	\$ cts
45 Vic., cap. 25...	156,800 00	144,000				8,960 00	152,960 00
46 do 14...	384,000 00						
46 do 25...	80,000 00						
48-9 do 59...	95,000 00	32,000	37,027	186,745	202,219	252,013 00	690,004 00
49 do 10...	196,295 00						
49 do 24...	28,800 00						
50 do 3...	96,000 00						
49 do 25...	89,800 00						
49 do 10...	70,000 00	32,000	57,600				89,600 00
50-1 do 24...	12,800 00						
47 do 8...	272,000 00		49,090		60,580	24,158 00	174,828 00
46 do 25...	116,200 00						
47 do 8...	76,800 00		32,000			40,060 00	210,060 00
47 do 24...	32,000 00						
47 do 8...	32,000 00						
49 do 10...	57,600 00		25,098				25,098 00
47 do 8...	48,000 00		48,000				48,000 00
45 do 14...	660,060 00		154,440				1,284,400 00
46 do 25...	660,000 00			1,051,590	78,370		
47 do 8...	128,000 00						
48-9 do 59...	19,200 00			128,000	18,200	159,400 00	305,600 00
49 do 10...	32,000 00						
48-9 do 59...	140,800 00						
47 do 8...	211,200 00						
Written off by 51	160,858 00			60,342			60,342 00
Vic., cap. 3...	60,342 00						
48-9 do 59...	72,000 00			64,972	4,950		69,922 00

APPENDIX No. 4.

CANADIAN PACIFIC RAILWAY.

OFFICE OF THE ENGINEER IN CHIEF,

OTTAWA, 26th October, 1888.

SIR,—The Honorable Minister has expressed a desire to be informed as to the general condition of the Canadian Pacific Railway throughout its entire length, and especially as to those sections traversing mountainous or hilly districts, among precipitous bluffs and along steep mountain slopes where land slides are to be guarded against and in which the line crosses deep ravines spanned by trestle and other wooden structures.

I have therefore the honor to report that during the month of July last I personally made a careful, I may say somewhat critical, examination of the section between Donald and Vancouver, and that I twice passed over the entire line from Ottawa to Vancouver, observing from the rear of the train the running condition of the road.

I furthermore caused every structure and the works of every description to be carefully inspected by an engineer during August and September last, upon those sections which are most difficult and costly to maintain, viz. between Callander and Port Arthur, 650 miles, and between Banff and Vancouver 504 miles, and, from the information thus obtained, I am pleased to be able to pronounce the road to be in good running condition. Some of the materials of the structures are commencing to decay, and many of the ties are rotting, but gangs of carpenters and trackmen are constantly engaged in renewing these materials and maintaining the efficient condition of the works.

On the mountain sections as might be expected, earth and rock slides sometimes occur, requiring great watchfulness and care on the part of the employees of the railway. As on other roads, so in this, rock loosened by the action of heavy rains and frost should be periodically barred down, and working trains should be brought into service each season to remove the debris from the slopes of the cuttings.

On part of the line this service was receiving every attention, and I may presume that before the season closed it would extend to all those portions of the railway requiring such attention.

In these mountainous sections, great precautions appear now to be taken to insure the safe passage of trains, and so far as I can learn, the number of casualties during the last summer has been very small, and the trains ran with great regularity.

The snow protection in these regions is extensive, and substantial in character. The officers in charge of operation, who have had several years' experience in the Rocky Mountains, are of opinion that the road is so fully guarded against snow slides that the service is not likely to be interrupted from this cause. The company are also taking precautions against snow blockades, by the introduction of powerful rotary snow shovels, and it is confidently expected that these machines will be effectual against the heaviest drifts which they may encounter.

During the past year, very extensive additions have been made to the engine power and car stock, so that the means of transport will probably meet all requirements. The elevator capacity at Port Arthur has also been largely increased, and this will greatly facilitate the movement of grain from Manitoba and the North-West.

In fact, I consider the railway to be in excellent running condition, and very well equipped.

[1888]

The time has certainly arrived when preparations should be made to replace year by year, many of the wooden pile and trestle structures by solid embankments or other permanent work, until these timber structures shall have disappeared, and I observed that several steam excavators were being set in place along the line for that purpose.

The traffic seems to be in a most encouraging condition. During the nine months ended on the 30th September, 1887, and 1888, the figures are :—

	1887.	1888.
Gross earnings.....	\$7,904,469	\$9,371,430
Working expenses.....	5,807,566	7,078,551
Net earnings.....	<u>\$2,096.903</u>	<u>\$2,292,879</u>

When it is remembered that the railway has scarcely been in operation for three years, this is truly a surprising development, which must be felt by every interest throughout the Dominion, and which establishes convincingly the necessity of the Canadian Pacific Railway to Canadian progress.

I have the honor to be, Sir,

Your obedient servant,

COLLINGWOOD SCHREIBER,

Engineer in Chief.

A. P. BRADLEY, Esq.,

Secretary Department Railways and Canals.
Ottawa.

APPENDIX No. 5.

CANADIAN GOVERNMENT RAILWAYS, OFFICE OF THE CHIEF ENGINEER AND GENERAL MANAGER,

OTTAWA, 17th September, 1888.

SIR,—I have the honor to present my annual report upon the Oxford and New Glasgow and the Cape Breton divisions of the Government railways now under construction.

OXFORD AND NEW GLASGOW DIVISION.

This division commences at the Oxford Junction Station of the Intercolonial Railway and passes through the Counties of Cumberland, Colchester and Pictou, to Brown's Point Junction on the Pictou Town Branch of said railway, it is 67·60 miles in length, and has a branch 4·75 miles in length to the harbor of Pugwash; it runs through a fine agricultural country with considerable population, and passes in close proximity to the towns of Oxford, Pugwash, Wallace, Tatamagouche and River John.

The grades and general alignment are favorable, the maximum grade being 53 feet to the mile and the minimum radius of curve 955 feet.

The road bed is designed to be broad and well formed, the structures will be of a most permanent character, the culverts and piers and abutments of bridges will be of strong, well built solid masonry and the bridge superstructure will be of steel, the rails will also be of steel. The ties will be laid two feet centres, and the road will be well ballasted. The water service will be very efficient, and the station houses are of neat design. The road when completed will be first class in all respects and should be cheap to maintain and operate.

For construction purposes the line has been divided into seven sections as follows, viz:—

Main Line.

	Miles.
1. Oxford Junction to Oxford Village.....	3
2. Oxford Village to Pugwash Junction.....	13
3. Pugwash Junction to Wallace.....	7
4. Wallace to Mingo Road.....	17
5. Mingo Road to Brown's Point.....	27·60
	67·60

Pugwash Branch.

6. Pugwash Junction to Giles Cove	4
7. Giles Cove to Pugwash Harbor.	·75
	4·75
Total.....	72·35

1. Messrs. McDonald & O'Brien are the contractors for the construction of the road between Oxford Junction and Oxford Village.

2. Messrs. McDonald, O'Brien & Cook are the contractors for the grading and masonry of the section between Oxford Village and Pugwash Junction.

[1888]

3. Messrs. McDonald, O'Brien & Cook are the contractors for the grading and masonry of the section between Pugwash Junction and Wallace.

4. Messrs. Stewart & Jones are the contractors for the grading and masonry of the section between Wallace and Mingo Road.

5. Messrs. Gray, McManus, Trites & Co., are the contractors for the construction of the section between the Mingo Road and Brown's Point.

6. Mr. Donald Sutherland is the contractor for the grading and masonry of the section between Pugwash Junction and Giles Cove.

7. Messrs. McDougald & Giles are the contractors for the grading, masonry and wharf of the section between Giles Cove and Pugwash Harbor.

The ties for the sections of road between Oxford Village and the Mingo Road including the branch from Pugwash Junction to Pugwash Harbor are being supplied under contract with Mr. R. L. Black and Mr. D. Campbell.

No arrangements have yet been made for the steel bridge superstructures, the erection of station houses and water services, and the tracklaying and ballasting on the sections between Oxford Village and the Mingo Road, including the Pugwash Branch; but the time has now arrived when contracts may be made to advantage for the steel bridge superstructures, the station buildings and water services.

Provision for the carrying on of the tracklaying and ballasting on the section of road between Oxford Village and the Mingo road including the Pugwash Branch may to advantage be delayed for a time.

I have recently closely inspected the works under construction upon this line, and find them being faithfully executed both as regards the materials used and the workmanship. The mason work is composed of a fine quality of large durable stone, well and strongly put together, the bridge masonry is especially massive. The most important pieces of mason work at present built are several large arch culverts, a high pier and two large abutments for Wallace River bridge, two heavy abutments for the passage of the Wallace road under the railway, two piers and two abutments for the River John bridge, and three abutments for bridges passing highways under the railway near Tatamagouche. In addition to the structures above referred to, a number of substantial box and beam culverts have been built, those upon Stewart & Jones' contract have the neatest and most workmanlike appearance, indicating the touch of first class mechanics, although those on the other sections are believed to be equally strong and substantial. All the arch culverts and bridge masonry show skill in construction and a careful selection of material—if the mason work is vigorously prosecuted by all the contractors to the close of the season and the weather prove favorable for railway works, I see no reason why the entire masonry on the line should not be completed this year. The points requiring diligent attention are the foundations of the pivot pier, and other remaining pier, of the Wallace River bridge on Messrs McDonald, O'Brien & Cook's contract, the abutment and piers of the French and Waugh Rivers on Messrs. Stewart & Jones' contract. I have urged upon these gentlemen the necessity of prompt action in commencing and vigorously prosecuting these erections and I have every confidence they will do so.

The wharf at Pugwash being built by Messrs. McDougald & Giles is very nearly completed, and when finished will, I believe, be a strong structure.

The grading between Oxford Station and the Mingo Road has been much retarded by the wetness of the season. The material in many of the larger cuttings being of a stiff sticky clay makes it impossible to work these cuttings during dripping weather, hence they are not so far advanced as could be desired, and it is possible some of them will not be finished this year, but if the weather clears up and continues fine for the remainder of the working season, and the contractors go energetically to work and prosecute their work vigorously, the contracts may all yet be completed before New Years day.

Messrs. McDonald & O'Brien have practically completed their contract between Oxford Junction and Oxford Village, and this section of road is in condition to be opened for traffic. This section is thoroughly ballasted and a good surface has been put on the track.

On Messrs. Gray, McManus & Trites contract, between Mingo Road and Brown's Point, there should be no difficulty whatever in finishing all the work this year, excepting, perhaps, the ballasting, and this may be accomplished if the weather is favorable for the rest of the season and the work is pushed forward energetically. About six miles of track is laid from Brown's Point and two miles additional track-laying will reach the ballast pit, so that once this point is reached the track-laying and ballasting can proceed simultaneously, and the other works should be completed in advance so as to admit of the track-laying being proceeded with without interruption, and as the station buildings and water service are in course of erection and well in hand it all depends upon the energy displayed in prosecuting the works for the next few months as to whether or not this section of the road will be completed and in condition for traffic, as required by their contract, by the close of this season. I am pleased to be able to state that the works of construction, so far as they have advanced, appear to be a credit to the contractors and also to the Government engineers and inspectors employed upon the line, and I trust to seeing the works carried through to completion in an equally satisfactory manner.

The following is a list of the equipment provided:—

Ergines	9
Box cars.....	72
Platform cars.....	10
Eastman heater cars.....	10
Vans.....	2
Cattle cars.....	6

CAPE BRETON DIVISION.

This division embraces a trunk line of railway from Point Tupper on the Cape Breton shore of the Straits of Canso, opposite the terminus of the Eastern Extension Railway at Mulgrave to a point near Leache's Creek, a distance of 78 miles, with an extension into the town of North Sydney, 5 miles, and also an extension into Sydney, 13.75 miles, and a connection with the International Coal Company's Railway, 1.25 miles, giving an aggregate mileage under construction of 93 miles.

For the purposes of construction the line has been divided into two sections as follows, viz. :—

	Miles.
1. Point Tupper to Grand Narrows.....	45.5
2. Grand Narrows to Sydney, and North Sydney and Spur....	52.5
Total.....	98.0

1. For the construction of the section between Point Tupper and Grand Narrows Messrs. Isbester & Reed are the contractors.

2. For the construction of the section between Grand Narrows and Sydney and North Sydney Messrs. Sims & Slater are the contractors.

In the first place with a view of testing the practicability of holding a wharf at Point Tupper the most suitable point for crossing with the ferry boat from Mulgrave, the terminus of the Eastern Extension Railway, a contract was made with Mr. O'Donohue for the construction of a crib 40 by 80 in 16 feet of water at low tide, to form a section of the wharf. This he completed, and it stood the test of the run of ice last winter without a scratch, and moreover could be reached by the ferry boat at times when all the other ports were blocked with ice, so that the fact is established I think beyond doubt that the right point for the eastern terminus of the Cape Breton Railway has been selected.

1. Messrs. Isbester & Reed, upon executing their contract last autumn, organized at once for active operations, laying in large quantities of supplies and sending in a very complete working outfit. They at once explored for quarries and located a number, which showed most favorable indications for an ample supply of suitable stone, but as each was worked into, this stone ran out after quarrying some 5,000 or 6,000 yards and delay occurred in consequence as several of the quarries had to be abandoned and diligent search resulted in no new discoveries. The stone procured, though large, heavy, durable and suitable for making good solid mason work, is not so neat in appearance as that procured at Wallace, and used on the Oxford and New Glasgow Railway. A 10 foot arch culvert, several bridge abutments, the pedestals and abutments of two of the steel trestles, and a number of box culverts have been built, the work is solid and substantial. The steel bridge superstructures and trestles are all delivered and the timber for the floor system, and the erection of some of the larger trestles will be commenced at once, but I have no expectation of the culverts and bridgework being completed before next spring. The earthwork is largely composed of a stiff clay interspersed with boulders which when worked in wet weather becomes so churned up by the horses and carts passing over it, that it is impossible to work it until it dries up, and as the weather the last six weeks has been very wet, scarcely a day passing without a downpour of rain, the grading has been much delayed. Even should the balance of the season prove fine and dry it will be impossible to finish the work this year, there being only about 40 per cent. of the grading done. There are about 20,000 ties delivered, the expectation being that the greater portion of the ties will have to be procured in New Brunswick during the coming winter, as also will the lumber for the station buildings and the water services; however, I can see no difficulty in the tracklaying being proceeded with in the spring, and in having the entire work completed and the road ready for traffic by the 1st November, 1889.

Messrs. Sims & Slater commenced work on their contract for the construction of the section between the Grand Narrows and North Sydney and Sydney in the winter of 1886 and prosecuted the work during the following year until December, 1887, having been favored with a most propitious season for carrying on works of railway construction, it having been almost unprecedentedly dry.

The clearing of the right of way was done and considerable progress had been made with the grading, but very little masonry had been built and the quarries were in a most unsatisfactory condition, the daily output of stone therefrom being very trifling, and the organization, if organization it could be termed, for carrying on this class of work was very defective; in fact at the time they were relieved of the management of the contract the works were dragging along very slowly, the workmen and mercantile community having apparently lost confidence in them. So unsatisfactory was the state of affairs that it became necessary for the Government to take the work out of the contractors hands' and finish it to the best possible advantage. The contractors' surety having been informed by her advisers that she could complete the work without loss to herself, urged, through her solicitors, to be allowed to carry it through to completion; consent was given to this arrangement, but as month after month passed and the returns came in, it became evident that she could not do so, and she asked that other arrangements be made; and in the month of June last the Government assumed control of the work and at once arranged for vigorous prosecution by jobbing out the grading, cribbing, &c., in small contracts and organizing efficiently for carrying on the mason work by day's labor. Several scows for carrying stone from the quarries to the sites of the structures were built, steam tugs chartered to tow them, additional teams employed to haul the stone, the force very largely increased in the quarries, and about eight gangs of builders and a large number of stone cutters were employed at the site of the structures, as well as a force preparing the foundations.

The station buildings were let to a responsible contractor and the work generally is making good progress. The masonry, of which there will be about 16,000 cubic yards, will, I have no doubt, be finished this year. The crib wharfing will also be

completed this season, but the grading and the station buildings will probably not be fully completed until next spring. A number of steel bridge superstructures have been erected and the balance should be in place before next spring.

About 2,000 tons of rails are to be delivered at the Grand Narrows this season, and it is proposed to deliver an equal quantity at Sydney in the early spring, so that the laying of the track may be proceeded with from both ends at the same time until the entire line is covered; while this work is in progress the ballasting of the road will be carried on.

The work on this section is being conducted under the careful supervision of Mr. Hiram Donkin, an engineer favorably known in the profession for his ability, energy, close application to work, his uprightness of character, and for his frugal management of work in his charge, who, with the faithful aid of his staff, will, I am satisfied, carry the work through with economy and despatch, in an efficient manner, so as to have this division ready for traffic by September next.

The present proposition is to cross the Grand Narrows by a steam train ferry, and to this end preparations are being made, but it may be worth considering whether or not a steel bridge resting on iron cylinders filled with concrete would not be preferable. The length of such a structure would be 1,600 feet.

The quantity of rolling stock already provided is, engines 8, box cars 25, platform cars, 80.

It will therefore be observed that if I am correct in my conclusions both the Oxford and New Glasgow and the Cape Breton Divisions of the Government railways will be completed and in condition to be opened for traffic next autumn.

I have the honor to be, Sir,

Your obedient servant,

COLLINGWOOD SCHREIBER,
Chief Engineer and General Manager.

APPENDIX No. 6.

CANADIAN GOVERNMENT RAILWAYS.

OFFICE OF THE CHIEF ENGINEER AND GENERAL MANAGER,

OTTAWA, 20th October, 1888.

Mileage table of the Canadian Government Railway System in Operation

	Miles.
Intercolonial Railway.....	894
Eastern Extension Railway.....	80
Windsor Branch Railway.....	32
Prince Edward Island Railway.....	211
	<u>1,217</u>

Sir,—Herewith I have the honor to submit to you the reports and accounts of the working of the railways in operation, under my charge, during the year ended the 30th June, 1888.

The Picton Town Branch of the Intercolonial Railway, 14 miles in length, was opened for traffic on the 28th November last, making the aggregate length of the Government railways, in operation, at the close of the year 1887-88, 1,217 miles, the average over the whole year being 1,210 miles.

The result of the year's business of these railways may be stated as follows:—

Name of Railway.	Average mileage per year.	—	Amount.		Profit.		Loss.	
			\$	cts.	\$	cts.	\$	cts.
Intercolonial.....	886	Earnings.....	2,912,783	85	.....	363,657	76	
		Working expenses...	3,276,441	61				
Eastern Extension.....	80	Earnings.....	70,552	20	.....	20,402	53	
		Working expenses...	90,954	73				
Windsor Branch.....	32	One-third Earnings..	24,553	55	.....	513	22	
		Maintenance.....	24,040	33				
Prince Edward Island.....	212	Earnings.....	158,363	62	.....	71,276	83	
		Working expenses...	229,639	95				
Total.....	1,210	.....	.....	.....	513	22	455,336	62
		513	22
		.....	.....	.....	.....	.....	454,823	40

INTERCOLONIAL RAILWAY.

Upon reference to the foregoing table, it will be seen that the earnings of this railway, for the year under consideration, are short of the working expenses by \$363 657.76.

This result may be largely attributed to the heavy cost of keeping the traffic moving during the snow storms of last winter, the large volume of freight carried at unremunerative rates, the cost of additions and improvements such as are usually charged to capital account by railway companies, but which have been treated as part of the working expenses in the case of the Intercolonial Railway, and the expensive and costly repairs to the Richmond wharf.

The following table shows the gross earnings, the tonnage of freight, and the number of passengers carried in each year since the 1st July, 1876, when the railway was opened as a through trunk line.

Years.	Average Miles in Operation.	Earnings.	Tons of Freight carried.	Numbers of Passengers Carried.
		\$ cts.		
1876-77.....	714	1,154,445 35	421,327	613,428
1877-78.....	714	1,378 946 78	522,710	618,967
1878-79.....	714	1,292,099 69	510,861	610,101
1879-80.....	825	1,566,298 48	561,924	581,483
1880-81.....	840	1,760,393 92	725,577	631,245
1881-82.....	840	2,079,262 66	838,956	779,991
1882-83.....	840	2,370,921 10	970,961	878,600
1883-84.....	847	2,353,617 26	1,001,163	920,870
1884-85.....	861	2,368,153 65	970,059	914,785
1885-86.....	866	2,383,200 77	1,008,545	889,864
1886-87.....	867	2,596,009 83	1,131,334	940,144
1887-88.....	886	2,912,783 85	1,275,995	996,194

The above statement of the gross earnings, the receipt of freight and the number of passengers, shows a material increase over the corresponding figures of previous years. The Hon. Minister may be interested in knowing that the fresh fish business has developed very considerably, the quantity carried during the year having been 4,450 tons.

It is expected that during the coming winter the volume of ocean borne traffic will increase very materially, and that the quantity of coal going to points west of the Chaudière will be greater than heretofore. To ensure the rapid transport of this freight, the box car stock is being increased by 200 cars, and there will be about 22 more locomotives in the service than there were last winter, when, as is well known, great difficulty was experienced in moving the traffic promptly, owing to the insufficiency of the engine power, in consequence of which, the engines were run day and night, in order to push the freight forward, and to cause as little annoyance to shippers as possible.

A difficulty, however, now presents itself. There is not stable room enough to house our engine stock, and no less than 20 or 30 engines are nightly exposed to the weather in the open air at Moncton. It has also been found impossible to effect the necessary repairs in the Government shops, as they are insufficient in size to receive the number of engines offering for repairs. I therefore propose to ask for an appropriation on capital account, to cover the cost of a full circle engine house at Moncton, an addition of 112 feet by 200 feet to the machine shops there, and some additional machinery. Unless these be provided, the engine power must suffer severely from exposure and from want of proper maintenance.

The following is a statement of the quantity and classes of rolling stock purchased on capital account up to 30th June, 1887, and of the additions made during the last fiscal year:—

	Engines.	Passenger Car Stock.					Conductors' vans.	Box cars.	Platform cars.	Coal cars of three several kinds.	Snow ploughs.	Wing ploughs.	Flangers.
		1st class sleepers and parlors.	1st class.	2nd class sleepers.	2nd class.	Baggage, mail, &c.							
Total to 30th June, 1887.....	164	12	69	6	76	47	79	1529	1442	2038	31	10	20
Additions in 1887-88.....	.....	3	.....	.....	.....	.....	.....	106	8	148	6	.....	3
	164	15	69	6	76	47	79	1635	1450	2186	27	10	17

*These three flangers have been converted into snow ploughs at the charge of working expenses.

The following rolling stock has been rebuilt during the year 1887-88 to maintain the stock, at the charge of working expenses:—

	Engines	Passenger Car Stock.					Conductors' vans.	Box cars.	Platform cars.	Coal cars.	Snow ploughs.	Wing ploughs.	Flangers.
		1st class sleepers and parlors.	1st class.	2nd class sleepers	2nd class.	Baggage, mail, &c.							
1887-88.....	4	1	.....	.....	1	5	1	20	90	47	2	.....	3

The public begin to appreciate the comfort of the two parlor cars running between St. John and Halifax which were much better patronized during the past summer than in that of 1887. The sleeping cars are now not only run upon the night express trains, but upon such of the English mail "Specials" from Halifax and Rimouski as are run at night. To enable this latter service to be performed three additional "sleepers" have been provided. The arrangement will add greatly to the comfort of the passengers landing at Halifax and Rimouski from the English mail steamers. The sleeping car "Miramichi" which was destroyed by fire in September, 1888, has been rebuilt during the year and is now in service.

Every precaution is now taken to guard against the destruction of these cars by fire. They are heated by steam from the engine, and lighted by electricity, both of which are great improvements on the old modes of heating and lighting.

The European mails, which are landed at Halifax in winter, and at Rimouski in summer, received good despatch over the Intercolonial Railway, and, with the exception of one or two occasions during the winter, made excellent time.

The locomotives procured during the last two or three years are of a much heavier type than those originally in the service, in consequence of which it has

been necessary to increase the strength of the iron bridges by means of additional bracing, at considerable cost to the working expenses. It also became necessary to introduce a new and stronger floor system to these bridges, and this was also charged to working expenses.

During the year, 88 miles of the light steel rails were lifted and replaced by 67 lb. steel rails. With the heavy rail renewals which have been going on for some time past, the permanent way should be in very fine condition. Unfortunately, however, the new rails are proving to be, in many cases, of very poor quality, and are wearing very badly. Every precaution has, however, been taken to ensure a good wearing rail. They are inspected by a competent inspector, and are guaranteed by the makers for seven years, and all rails that fail within that period the manufacturers are bound to replace free of cost to the Government.

The rails are now being examined with a view of preparing a demand on the manufacturers to replace those which have failed up to this date.

CAPITAL ACCOUNT.

The expenditure on works under this heading, during the year, may be stated as follows:—

Total cost of road and equipment to 30th, June 1887.	\$44,995,982	42
Increased accommodation at Halifax, St. John, Moncton and Rivière du Loup	\$ 32,157	93
Original completion.....	10,004	12
Branch lines.....	352,881	52
Rolling stock.....	258,334	81
Approaches to Sackville Wharf.....	1,398	20
Under crossing at Bathurst.....	4,083	26
Coal shed at Amherst.....	567	50
Additional machinery.....	9,770	25
Servis tie plates.....	12,571	50
Snow sheds and fences.....	38,998	75
Appliances for heating by steam and lighting by electricity.....	21,617	54
		<u>742,385 38</u>

It appears that a sum was paid to the New Brunswick Government in 1887 by the Department of Railways, in connection with the purchase of the section of the Intercolonial Railway between the Missiquash and Painsee Junction, and which did not pass through the railway books at Moncton, and therefore appears for the first time this year of.....

149,441 40

\$45,887,809 20

Less refund of a sum paid into court in a land claim case, and which was not used..... 50 20

Total cost to 30th, June 1888.....\$45,887,759 20

This amount may be classified as follows:—

Road.....	\$39,330,105	05
Rolling stock.....	6,557,654	15
Total.....	<u>\$45,887,759</u>	<u>20</u>

The Pictou Town Branch has been in successful operation since the 28th November last, dispensing with the cost of maintaining the ferry service across the harbor, the steamer "Mayflower," which performed that service, being now for sale. This branch has proved a great convenience to merchants and others having occasion to visit the town, as well as to residents. It is from this branch that the Oxford and New Glasgow division of the Intercolonial Railway springs, at a point about two miles from Pictou, known as Brown's Point.

Since my last annual report, a system of heating passenger cars by steam from the engine and of lighting them by electricity has been introduced in the interest of the public safety, thus minimizing the danger of fire in case of accident. At the close of the year, 26 passenger cars and 15 locomotives had been fitted with steam heating apparatus, and 18 passenger cars with appliances for electric lighting. Both these improvements have worked satisfactorily, and appear to be appreciated by persons travelling in trains thus equipped.

The Servis tie plates have not been sufficiently long in use to enable me to form an opinion as to the extent of their utility, but there appears little doubt that they will be useful on cedar ties.

The rolling stock is in good running order, and the maintenance of the road has received careful attention, and consequently the track is in excellent condition barring the low joints caused by the failure of the new 67 lb. steel rails laid during this and previous years. This difficulty, as I have said, it appears impossible to control.

EASTERN EXTENSION RAILWAY.

Capital Account.

The capital account remains the same as in the preceding year, thus:—

Cost of road.....	\$1,088,311 97
do rolling stock.....	196,183 79
	\$1,284,495 76

The gross earnings for the year were \$70,552.20, an increase over those of the preceding year of \$6,445.10, or 9 per cent.

Owing to the decay in the bridges and ties, the expenditure in maintaining the road in an efficient state is large and will continue to be so for at least a couple of years longer. It is, however, anticipated that the working expenses will not be quite so heavy in future as they have been during the last three years, and as there is every prospect of the revenue increasing, a reduction in the loss in operating the road may be looked for. By the close of the year 1888-89, the water service will be made very efficient. In the past the Haggas system has been in use, and has been found very unsatisfactory. The station ground and wharf at Mulgrave, on the Strait of Canso, are far too small and cramped to admit of a satisfactory disposal of the business, but an extension of both is being made, and in my next annual report I hope to be able to say that the facilities for shipping goods at Mulgrave are very much improved.

Both road and rolling stock are in good running order.

WINDSOR BRANCH.

No change has been made in the operation of the Windsor Branch; the Windsor and Annapolis Railway Company continue to work the traffic, the Government maintaining the way and works.

The result of the operations of the railway during the year is as follows :—

One-third gross earnings paid by the company to the Government	\$24,533 55
Cost of maintenance of way and works.....	24,020 33
Profit.....	<u>\$ 513 22</u>

It will thus be observed that the road has been maintained at an expenditure less than the revenue by \$513.22.

The iron rails show signs of wear, and it will be necessary to renew about three miles with new steel rails during the year 1888-89. It may also be necessary to lay down a few miles of ballast.

The way and works have been maintained in good condition, and I see no reason to fear delay with the traffic this winter if the Windsor and Annapolis Railway Company provide themselves with snow ploughs of the most approved design.

PRINCE EDWARD ISLAND RAILWAY.

Capital Account.

No expenditure has been made on capital account, and the cost of the road and rolling stock remain as at the close of the preceding year.

Cost of road.....	\$3,283,051 89
do rolling stock.....	458,729 00
Total.....	<u>\$3,741,780 89</u>

Both road and rolling stock are in first-rate condition.

The rolling stock provided on capital account consists of :—

Engines.....	21
First-class cars.....	17
Second-class and baggage cars.....	15
Postal and smoking cars.....	3
Box cars.....	175
Platform cars.....	125
Conductors' vans.....	3
Pay cars.....	1
Snow ploughs.....	8
Flangers.....	<u>7</u>

The gross earnings for the year exceed those of any previous year, and compare with those of the first year of the railway's operation as follows :—

1875-76.....	\$118,060 96
1887-88.....	158,363 62
Increase.....	<u>\$40,302 66</u>

The traffic is thus developing from year to year.

The working expenses are large, as they include the cost of a heavy freight engine, the rebuilding of 10 platform cars of 10 tons capacity, the erection of an iron bridge at Curtiss Creek, and the building of three masonry box culverts. These are works outside of the ordinary repairs, and may be considered to be what are known as "betterments."

In former years the train service on the Cape Traverse Branch was only bi-

weekly. Last year it was made daily, but as the traffic was very trifling, it did not even pay the cost of the train service, not to speak of maintenance. At the same time I presume that the daily service is an accommodation to some people.

GENERAL REMARKS.

The steady increase year by year in the volume of traffic, both passenger and freight, is a sure indication that the various interests of the country are in a healthy condition, and that there is a regular advance in wealth and general well being. All who have been in the habit of travelling over the Intercolonial Railway since its opening, must have observed how the wilder sections of the country are being brought under cultivation, and how industries have increased in number and prosperity. The rapid increase of local freight proves the value of the railway to the districts it traverses, and is a most important consideration in estimating the future of the road.

I have the honor to be, Sir,

Your obedient servant,

COLLINGWOOD SCHREIBER,
Chief Engineer and General Manager.

A. P. BRADLEY, Esq.,
Secretary, Department of Railways and Canals.

APPENDIX No. 7.

INTERCOLONIAL RAILWAY.

OFFICE OF THE CHIEF SUPERINTENDENT,

MONCTON, N. B., 25th October, 1888.

SIR,—I have the honor to submit the following report on the working of the Intercolonial Railway during the fiscal year which ended 30th June, 1888.

I enclose the reports of the Chief Engineer and Mechanical Superintendent and the following statements prepared by the Chief Accountant and Treasurer:—

- No. 1. Capital Account.
2. Revenue Account.
3. Locomotive power (Abstract No. 1.)
4. Car expenses (do 2.)
5. Maintenance of way and works (do 3.)
6. Station expenses (do 4.)
7. General charges (do 5.)
8. General stores account.
9. General balance.
10. Comparative statement of averages.

The length of railway in operation during the whole year was 880 miles. On the 28th November, 1887, the Pictou Town Branch, 14 miles in length, was opened for traffic, making the total length of railway in operation at the close of the year 894 miles.

CAPITAL ACCOUNT.

The total cost of road and equipment on 30th June, 1887, was..	\$44,995,982 42
Add amount paid in previous years, <i>see</i> Public Accounts.....	149,441 40
	<hr/>
	\$45,145,423 82
Less refunded on account of previous year's expenditure.....	50 00
	<hr/>
	\$45,145,373 82

The additions during the year are as follows:—

For Halifax Extension.....	\$ 8,992 97
Increased accommodation, St. John.....	2,513 89
Increased accommodation, Moncton.....	16,653 56
Increased accommodation, Rivière du Loup	3,997 51
Completion of the Intercolonial Railway...	10,004 12
Rolling stock.....	258,334 81
St. Charles Branch.....	106,045 18
Dartmouth Branch.....	3,442 28
Dalhousie Branch.....	1,343 00
Rivière du Loup Town Branch.....	355 79
Indiantown Branch.....	9,940 45
Pictou Town Branch.....	227,924 54

[1888]

Track to wharf at Sackville.....	1,398 20	
Road crossing at Bathurst.....	4,083 26	
Coal shed at Amherst.....	567 50	
Machinery	9,770 25	
Servis tie plates	12,571 50	
Snow sheds and snow fences	38,998 75	
Appliances for heating cars with steam and lighting them with electricity.....	21,617 54	
Woodhill's claim, Halifax.....	3,517 00	
Legal expenses in above claim	313 28	
		<u>\$742,385 38</u>
Making the total cost to the 30th June, 1888.... ..		<u><u>\$45,887,759 20</u></u>

The \$50 refunded on capital account was advanced in 1885 to pay for land on the Dartmouth Branch but was not used.

The \$149,441.40 added to last year's capital account is the balance of an amount of \$150,000 paid at Ottawa during last fiscal year to the Province of New Brunswick in settlement of an old claim.

The expenditure for Halifax Extension was for the filling of a water lot, and for the settlement of claims on account of previous years.

The expenditure for increased accommodation at St. John was for providing buildings and appliances for cleaning sleeping cars, and on account of claims.

The expenditure at Moncton was for additional workshop buildings required on account of the increased traffic.

The expenditure at Rivière du Loup was for an enlargement of the yard which was necessary in consequence of the opening of the Temiscouata Railway which joins the Intercolonial Railway at this place.

Completion of the Intercolonial Railway. This expenditure was for the settlement of land damages, &c., on account of the original construction of the line.

The expenditure on account of rolling stock was to provide additional sleeping cars, and also additional freight cars required for the increased traffic in coal and other freight.

St. Charles Branch. This expenditure was for the settlement of claims for land and other damages, and for building snow sheds and snow fences where they were found to be needed.

The expenditure at Dartmouth was in the settlement of claims for land and other damages.

The expenditure on the Dalhousie Branch was for land damages and providing two freight cars.

Rivière du Loup Town Branch. This was to pay for materials used in the extension of the wharf at Rivière du Loup.

Indian Town Branch. This expenditure was to provide freight cars and pay land damages.

The work of construction on the Pictou Town Branch was continued during the year, and the expenditure is for payments made on the several contracts. This branch was so far completed as to permit of the running of trains, and it was opened for traffic on the 28th November, 1887.

The expenditure at Sackville was rendered necessary by the completion of the New Brunswick and Prince Edward Railway, which has its junction with the Intercolonial Railway at this place.

The expenditure for machinery was to provide additional machines for the work shops at Moncton.

The Servis tie plate is a patented device which is being tried. It is designed for the purpose of increasing the life of the ties by preventing the rails from cutting into them.

The expenditure for snow sheds and snow fences was for providing such protection at places where it had not previously been, but where it had been proved to be necessary by the experience of the last two or three winters.

Twenty-six passenger train cars were fitted with steam heating apparatus, and fifteen locomotives were fitted with apparatus for supplying steam to these cars.

Eighteen passenger train cars were fitted with electric light apparatus.

REVENUE ACCOUNT.

The earnings and expenditure for the year compare as follows:—

Expenditure	\$3,276,441 61
Earnings	2,912,783 85
	\$ 363,657 76

The gross earnings for the year were \$2,912,783.85, being a considerable increase over last year, as follows:—

Earnings, 1887-88.....	\$2,912,783 85
do 1886-87.....	2,596,009 83
	\$ 316,774 02

This increase was in both passenger and freight traffic, the increase in passenger traffic being \$52,363.09, and in freight traffic \$252,146.28.

There was an increase over the previous year in the quantity of freight carried of 144,661 tons, as follows:—

	Tons.
Weight of freight carried in 1887-88.....	1,275,995
do do 1886-87.....	1,131,334
	144,661

The increase in local freight carried was 93,002 tons, and in through freight 51,659 tons.

The following is a comparative statement of a few of the chief articles of freight, showing the quantity carried in this and in the previous year:

Articles.	1886-87.	1887-88.	Increase.	Decrease.
Barrels flour	753,480	845,750	92,270	
Bushels grain.....	1,016,334	1,211,540	195,206	
Lumber in feet.....	161,168,003	196,444,819	35,276,816	
Head of live stock.....	80,782	90,439	9,657	
Other goods in tons.....	820,300	909,487	89,187	

It is gratifying to observe an increase in all the articles of freight mentioned above.

The coal traffic from the mines in Nova Scotia to the Upper Provinces still continues to increase, as will be seen by the following comparative statement for the year which ended 31st December.

	Tons.
1879	570
1880	10,246
1881	30,629
1882	35,089
1883	54,891
1884	112,898
1885	165,791
1886	175,512
1887	192,022

For several years past I have drawn attention in the annual report to the extremely low rate at which this coal is carried, and there can be no doubt that it is one of the chief causes of the annual deficit.

In passenger traffic there was an increase of 56,050 in the number carried, as follows:—

In 1887-88	996,194
1886-87	940,144
	56 050

In 1886-87 the increase over the previous year was 50,280 in the number carried.

WORKING EXPENSES.

The working expenses for the year were \$3,276,441.61 being a considerable increase over last year, as follows:—

1887-88	\$3,276,441 61
1886-87	2,828,115 58
	\$448,326 03

They compare with last year as follows per mile run by engines and by trains, and per mile of railway:—

Per mile run by engines:—

	Cents.
1887-88	55.19
1886-87	51.74

Per mile run by trains:—

1887-88	66.33
1886-87	62.67

Per mile of railway:—

1887-88	\$3,723 23
1886-87	3,265 72

The necessary repairs were made to the permanent way and structures, and all the works of the railway were maintained in a thoroughly efficient state.

The total number of new ties put into the track was 291,828.

Seventy miles of track were re-ballasted.

Fifty-one sidings, making a total length of five and a-half miles, were constructed.

The fences received necessary repairs, and one hundred and thirty-two miles of fences were rebuilt. Three kinds of fencing were used, woven wire, barbed wire and lath and wire.

Extensive repairs were made to snow sheds and snow fences, and a large quantity of snow fencing was rebuilt; the total cost being over thirty-six thousand dollars.

The buildings on all parts of the line received necessary repairs.

Three station houses, three telegraph houses, a large building for the storage of coal, and one for the storage of oil were built.

A station house and a large shed for the storage of coal were built on enlarged and improved plans.

Twelve semaphore signals were erected at places where there had been none before.

The repairs and renewals of wharves were extensive, over thirty-four thousand dollars having been expended on one of the wharves at Richmond.

There was a large expenditure for the repairs and renewals of the masonry of bridges and culverts.

An iron bridge of three spans was substituted for a wooden bridge. Three pairs of iron girders were substituted for wooden ones, and one iron overhead bridge was erected in the place of a wooden one.

The rolling stock received necessary repairs and is in good order.

Four new locomotives were purchased to replace an equal number taken out of service.

One hundred and fifty-seven freight cars having been unfit for use, were replaced by an equal number of new cars of improved design, and which are capable of carrying much heavier loads. Six passenger train cars were also replaced by new ones of improved design. The sleeping car "Miramichi" which was burnt in September, 1886, was replaced by a new one. The cost of all these new locomotives and cars were charged to working expenses.

The work of improving the water supply for locomotives was continued, and five of the large 50,000 gallon tanks were built and fitted with steam pumps. The expenditure was much greater than last year, being over forty thousand dollars.

Many of the works above referred to were improvements made in addition to the maintenance and renewal of the original works, but the cost is charged the working expenses and against the earnings for the year.

It having been determined to try steam, taken from the locomotive, as a means of heating passenger cars, several trains were completely equipped with the necessary apparatus for the purpose and were run during the whole of last winter. The trial having established the fact that it is possible to heat cars satisfactorily by this means, other passenger trains are being fitted with the apparatus.

Several trains have also been ever since the autumn of 1887 entirely lighted with electricity.

STORES.

The value of stores purchased was	\$1,187,201 18
The value of stores used was	1,464,343 04
The value of old materials sold was	156,577 92

The value of stores on hand at the end of the year was:—

Ordinary stores including fuel.....	\$257,246 68
Iron and steel rails.....	71,164 07
Second hand materials serviceable.....	41,873 00
Old material for sale.....	128,351 08
	<u>\$ 498,634 83</u>

The quantity of rails and old material on hand is less than last year. The old material was sold in the month of May by public tender, but the delivery of it to the purchasers had scarcely commenced at the close of the year.

GENERAL.

The ferry service across Pictou Harbor was discontinued when the railway from Stellarton to Pictou was opened for traffic 28th November, 1887, and the steamer "Mayflower" which performed that service is for sale.

During last winter some inconvenience was experienced in consequence of the failure of contractors for locomotives to deliver them at the time agreed upon.

The cost of clearing snow from the track was not so great last winter as in the winter of 1886-87, but it was considerably above the average, being over \$67,000, and to this should be added the cost of repairing snow ploughs, over \$26,000.

It gives me pleasure to state that the employés generally performed their duties faithfully and cheerfully.

I have the honor to be, Sir,

Your obedient servant,

D. POTTINGER,

Chief Superintendent.

COLLINGWOOD SCHREIBER, Esq.,

Chief Engineer and General Manager Government Railways,
Ottawa.

No. 1.—INTERCOLONIAL RAILWAY.
CAPITAL ACCOUNT, Year ending 30th June, 1888.

Dr.

Cr.

1887. June 30....	\$ cts.	\$ cts.	1887. June 30....	By Dominion of Canada..	\$ cts.
To Cost of road and equipment.....	44,995,992 42	.....	.....	45,145,373 82
Add—Amount paid in previous years. <i>Vide</i> Public Accounts.....	149,441 40	.....	.....	.....
Total per Public Accounts.....	45,145,423 82	.....	.....	.....
Less—Refunds on account of previous year's expenditure.....	60 00	.....	.....	.....
.....	45,145,373 82	.....	.....	.....
1888. June 30....	8,992 97	2,513 89	.....	.....	.....
Outlay on Halifax Extension.....
do Increased accommodation, St. John....	11,506 86	.....	.....	.....
do St. Charles Branch.....	106,045 18	.....	.....	.....
do Pictou Town Branch.....	227,924 54	.....	.....	.....
do Dartmouth do.....	3,432 28	.....	.....	.....
do Dalhousie do.....	1,343 00	.....	.....	.....
do Rivière du Loup Town Branch.....	365 79	.....	.....	.....
do Indian Town Branch.....	9,840 45	.....	.....	.....
do Rolling Stock.....	258,334 81	.....	.....	.....
do Pile approach track to wharf at Sackville.....	1,398 20	.....	.....	.....
do Servis Tie Plates.....	12,571 50	.....	.....	.....
do Increased accommodation, Moncton.....	16,653 66	.....	.....	.....
do do Rivière du Loup.....	3,997 51	.....	.....	.....
do Halifax Cotton Co.'s siding, Woodhill's claim.....	3,517 00	.....	.....	.....
do Machinery.....	9,770 25	.....	.....	.....
do Road crossing under I. C. R. at Bathurst.....	4,083 26	.....	.....	.....
do Appliances for lighting cars by electricity and heating by steam.....	21,617 54	.....	.....	.....
do Coal shed at Amherst.....	567 50	.....	.....	.....
do Snow sheds and snow fences.....	38,998 75	.....	.....	.....
do Legal expenses in connection with Halifax Cotton Co.'s siding.....	313 28	.....	.....	.....
do Expenditure on completion of I. C. R. between Rivière du Loup and Truro (works, permanent way, buildings, right of way, &c.).....	10,004 12	.....	.....	.....
.....	742,385 38	.....	By Dominion of Canada..	742,385 38
.....	45,887,759 20	.....	.....	45,887,759 20

MONCTON, N. B., 30th June, 1888

THOMAS WILLIAMS,
Chief Accountant and Treasurer.

No. 2.—INTERCOLONIAL RAILWAY.

REVENUE ACCOUNT, Year ending 30th June, 1888.

CR.

DR.

Previous Year.	Expenditure.	Year ending 30th June, 1888.	Previous Year.	Earnings.	Year ending 30th June, 1888.
\$ cts.		\$ cts.	\$ cts.		\$ cts.
887,626 41	Locomotive power	1,135,325 00	792,678 56	Passenger traffic.....	845,041 65
668,027 57	Car expenses	769,155 84	1,657,695 76	Freight do	1,909,843 04
782,052 79	Maintenance of way and works	811,225 31	145,635 51	Mails and sundries.....	157,900 16
333,576 22	Station expenses	377,969 18	2,586,009 83	Balance.....	2,912,783 85
162,689 65	General charges	174,809 23	232,106 75		363,657 76
2,833,972 64	Car mileage	3,268,484 56			
5,867 06		7,957 05			
2,828,115 58		3,276,441 61	2,828,115 58		3,276,441 61

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

MONCTON, N.B., 30th June, 1888.

No. 3.—INTERCOLONIAL RAILWAY.

LOCOMOTIVE POWER—(Abstract No. 1).

Previous Year.	—	Year ending 30th June, 1888.
\$ cts.		\$ cts.
8,727 69	Mechanical Superintendent's salary, clerk's office and travelling expenses.....	10,436 35
212,296 96	Wages, drivers, firemen and cleaners.....	234,682 95
357,564 55	Fuel.....	463,604 82
41,464 49	Oil, tallow, waste and small stores.....	51,635 80
202,384 32	Repairs to engines, tenders and engine tools.....	290,220 04
39,340 09	Water, including pump and tank repairs.....	40,452 73
35,848 31	Miscellaneous.....	44,292 31
887,626 41		1,135,325 00

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

MONCTON, N. B., 30th June, 1888.

No. 4.—INTERCOLONIAL RAILWAY.

CAR EXPENSES—(Abstract No. 2).

Previous Year.	—	Year ending 30th June, 1888.
\$ cts.		\$ cts.
54,810 70	Repairs to passenger cars.....	102,375 31
17,480 22	do postal, express and baggage cars.....	47,828 95
262,456 93	do Freight cars and vans.....	254,493 65
325,676 96	Wages of Conductors, train baggage masters and brakemen.....	250,266 85
39,263 10	Oil and waste for packing.....	38,703 85
48,823 64	Small stores and fuel.....	57,132 35
19,516 02	Miscellaneous.....	20,354 88
668,027 57		769,155 84

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

MONCTON, N. B., 30th June, 1888.

[1888]

No. 5.—INTERCOLONIAL RAILWAY.

MAINTENANCE OF WAY AND WORKS—(Abstract No. 3).

Previous Year.		Year ending 30th June, 1888.
\$ cts.		\$ cts.
6,714 61	Chief and Assistant Engineers, Salaries, Clerks, office and travelling expenses	6,752 57
279,456 96	Wags in repairing roadway, fences and semaphores, including new sidings laid in	315,899 33
166,531 72	Rails and fastenings, including new sidings laid in	38,127 28
55,480 89	Pies	71,553 27
84,611 47	Timber, lumber, etc., for repairs to bridges, cattle guards, crossings, snow-sheds, fences, etc.	160,739 34
6,824 51	Repairs to wharves	36,072 19
69,730 55	Repairs to buildings and platforms, including extensions of and additions to same	85,673 84
17,162 12	Repairs to snow ploughs, flangers and tools	26,141 43
92,312 40	Clearing ice and snow	67,781 25
3,327 56	Miscellaneous	2,484 81
782,052 79		811,225 31

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

MONCTON, N.B., 30th June, 1888.

No. 6.—INTERCOLONIAL RAILWAY.

STATION EXPENSES—(Abstract No. 4).

Previous Year.		Year ending 30th June, 1888.
\$ cts.		\$ cts.
260,701 11	Salaries and Wages of Station Masters, Agents, Clerks, Telegraph Operators, Station Baggage Masters, Yard Masters, Switchmen, Watchmen and Laborers	293,981 79
72,875 11	Fuel, oil, light, stationery, tickets and other incidental expenses.	83,987 39
333,576 22	Miscellaneous	377,969 18

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

MONCTON, N.B., 30th June, 1888.

No. 7—INTERCOLONIAL RAILWAY.

GENERAL CHARGES—(Abstract No. 5).

Previous Year.	—	Year ending 30th June, 1888.
\$ cts.		\$ cts.
64,224 16	Chief Superintendent, District Superintendents, Train Despatchers, General Freight Agent, General Passenger Agent, Clerks, office and travelling expenses	65,601 92
20,884 38	Accounting Department—Salaries of the Chief Accountant and Treasurer, Traffic Auditor, Paymaster, Cashier, Clerks, office and travelling expenses	25,072 04
18,930 57	Damages to men, animals and goods	13,222 71
19,125 93	Ferry service	16,500 52
1,243 75	Telegraph expenses (not including pay to operators)	619 93
24,167 07	Miscellaneous—Printing, advertising, &c.	38,814 91
14,113 79	Agency expenses	14,897 15
162,689 65		174,809 23

THOMAS WILLIAMS,
Chief Accountant and Treasurer.

MONCTON, N.B., 30th June, 1888.

No. 8—INTERCOLONIAL RAILWAY.

GENERAL STORES ACCOUNT, Year ending 30th June, 1888.

CR.

DR.

1887	1888						
June 30....	To Balance.....				1888		
		\$	cts.	\$	cts.		
				678,109	97		
June 30....	Purchases during year.....	1,187,201	18				
	Charges from other Departments...	219,087	11				
	Lebor.....	57	632	98			
	Staff pay-rolls.....	12,593	92				
				1,476,490	19		
				2,154,600	16		
	By Issues during year.....						
	Sales of material, fuel, &c., to other Railways, &c.....						
	Sales of old material.....						
	Balance—						
	Ordinary stores, including fuel iron and steel rails and fastenings.....	287,246	88				
	Second-hand material, service-able.....	71,164	07				
	Old material for sale.....	41,873	00				
		128,351	08				
				498,634	83		
				2,154,600	16		

THOMAS WILLIAMS,
Chief Accountant and Treasurer.

MONCTON, N.B., 30th June, 1888.

No. 9.—INTERCOLONIAL RAILWAY.

GENERAL BALANCE, Year ending 30th June, 1888

DR.

CR.

	\$	cts.	\$	cts.
Cash.....			19,631	01
General stores :—				
Ordinary stores, including fuel.....	237,246	68		
Iron and steel rails and fastenings.....	71,164	07		
Second hand material, serviceable.....	41,873	00		
Old material for sale.....	128,351	08		
Stations.....			498,634	83
Rents.....			2,105	04
Accident insurance.....			26,638	00
Unclaimed freight.....			11	05
Department accounts :—				
Militia.....	3,910	88		
Agriculture.....	17,086	51		
Post Office.....	45,400	24		
Canadian Pacific Railway rolling stock.....			66,378	03
Onaham Branch Railway.....			22,048	98
Quebec Central Railway.....			772	49
Northern and Western Railway of N.B., traffic account.....			2,630	87
do do general account.....				
Grand Trunk Railway, traffic account.....			2,454	81
Windsor and Annapolis Railway.....			6,403	34
New Brunswick Railway.....			28	01
Albert Railway.....			9,723	33
Elgin Branch Railway.....			86	54
Elgin, Pettoodiac and Havelock Railway.....			726	10
Kent Northern Railway.....			180	00
Tombacosta Railway.....			503	23
Canadian Pacific Railway.....			830	60
Central Railway of New Brunswick.....			429	39
Moncton and Buctouche Railway.....			44	96
Harvey Branch Railway.....			88	57
St. Martin's and Upham Railway.....			5,553	87
Chicago, Santa Fe and California Railway.....			130	00
Albert Southern Railway.....			12	00
Chicago and Grand Trunk Railway.....			5	06
Joggins Railway.....			6	50
Maine Central Railway.....			14	60
Union Freight Railway.....			176	00
Western Counties Railway, general account.....			9	76
			15,893	35

Dominion of Canada.....	\$	cts.
Stations.....	690,114	62
Suspense.....	34,770	90
Grand Trunk Railway, general account.....	2,631	83
Delaware, Lackawanna and Western Railway.....	6,776	26
Bay Chaleurs Railway.....	10	00
Gumberland Railway and Coal Company.....	0	25
Ontario Car Company.....	303	64
	3,333	75

[1888]

25

No. 9.—INTERCOLONIAL RAILWAY—Concluded.
GENERAL BALANCE, Year ending 30th June, 1888.

DR.

CR.

	\$ cts.	\$ cts.	\$ cts.
Western Counties Railway, traffic account		1,657 42	
Spring Hill and Parrsboro' Railway	17,650 77		
Halifax and Cape Breton Railway	3,161 99		
Windsor Branch Railway	1,546 82		
Intercolonial Express Company	318 83		
Pullman Palace Car Company	2,641 86		
Allan Steamship Line	870 35		
Great Eastern Line	1,892 13		
Acadia Coal Company	4 00		
Intercolonial Coal Company	6,143 43		
Vale Coal Company	954 55		
Nova Scotia Steel Company	24 27		
Louderderry Iron Company (limited)	6 60		
Truro Foundry and Machine Company	4 23		
Halifax Rolling Mills Company	171 45		
Goldbrook do	78 50		
Canada Locomotive and Engine Company	1,967 41		
Union Bearing Company	15 75		
Canada Shipping Company	660 84		
Prince Edward Island Steam Navigation Company	1,301 83		
Steamer "Admiral"	4 04		
do "Contest"	4,180 83		
Halifax Cotton Company siding	2,236 25		
Moncton do	10,639 07		
Remittances destroyed	325 00		
Town of Dartmouth	788 81		
Glengarry Station	8,000 00		
Bloomfield do	5 00		
Coal Branch do	25 21		
Weldford do	65 84		
St Luce do	55 00		
St Arsene do	80 00		
Bic do	6 11		
Schooner "Mary Jane"	22 00		
Individual accounts	71 30		
	6,949 11		
	737,931 25		737,931 25

THOMAS WILLIAMS,
Chief Accountant and Treasurer.

MONCTON, N. B., 30th June, 1888.

No. 10.—INTERCOLONIAL RAILWAY.

COMPARATIVE STATEMENT of Averages, Year ending 30th June, 1888.

	1887.	1888.
Mileage of railway.....	866	880
Engine mileage.....	5,466,488	5,936,035
Train do.....	4,512,599	4,939,253
Car do.....	52,001,928	56,008,930
Receipts per engine mile..... Cents	47.49	49.07
do mile of railway..... Dollars	2,927.70	3,309.98
Percentage of passenger earnings to gross earnings.....	Per cent 30.53	29.01
do freight do.....	63.86	65.57
do other do.....	5.61	5.42
Expenses per engine mile—		
Drivers, Firemen and Cleaners' wages..... Cents	3.88	3.95
Fuel.....	6.54	7.81
Oil, tallow, waste and small stores.....	.76	.87
Repairs to engines.....	3.70	4.89
Water and tank repairs.....	.54	.68
Miscellaneous.....	.65	.75
Total.....	16.07	18.95
Mechanical Superintendent's salary, office and travelling expenses.....	.16	.17
Total.....	16.23	19.12
Locomotive power per engine mile.....	16.23	19.12
Car expenses do.....	12.22	12.96
Maintenance of way and works do.....	14.31	13.67
Station expenses do.....	6.10	6.37
General charges do.....	2.58	2.94
Car mileage.....	Deduct 51.84	Add 55.06
Total per engine mile.....	51.74	55.19
Locomotive power per train mile.....	19.67	22.98
Car expenses do.....	14.80	15.57
Maintenance of way and works do.....	17.33	16.43
Station expenses do.....	7.39	7.65
General charges do.....	3.61	3.64
Car mileage.....	Deduct 62.80	66.17
Total per mile train.....	62.67	66.33
Working expenses per mile of railway.....	3,265.72	3,723.23

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

MONCTON, N.B., 30th June, 1888.

[1888]

37

 INTERCOLONIAL RAILWAY.

CHIEF ENGINEERS OFFICE,

MONCTON, N. B., 20th September, 1888.

SIR,—I have the honor to submit my report of the Engineering Department for the year ending 30th June, 1888.

TRACK.

The mileage of the main line and branches has been increased from 880 to 894 miles.

	Miles.
Previously reported	880
Pictou Town Branch	14
	<hr/>
Total	894
	<hr/> <hr/>

During the year 88 miles of rails, weighing 56 pounds to the yard, have been taken up and replaced with steel rails weighing 67 pounds to the yard.

TIES.

During the year 291,828 ties have been renewed in the main line, sidings and branches.

BALLASTING.

Ballasting was done on all divisions of the road.

Seventy and a half (70½) miles of the track were rebalasted.

SEMAPHORES.

Twelve new semaphore signals were erected during the year.

SIDINGS

Fifty-one new sidings have been put in at various points along the line, making additional accommodation to the extent of 29,248 feet, or about 5½ miles.

FENCING.

About 132 miles of barbed wire, woven wire and lath wire fence have been erected in place of old pole fences, and at points where fencing was not required before. About 32 miles of barbed wire fencing on the northern divisions were badly damaged by snow and ice breaking down the wire. This was repaired at a large cost.

The total cost of maintenance for ordinary fencing for the year has been \$86,836.68.

SNOW SHEDS AND SNOW FENCES.

8,549 lineal feet of new snow sheds were erected between Lévis and Ste. Flavie.

Of this, 5,691 feet was constructed with an iron frame of old rails covered with 1½ inch planed boards.

36,681 lineal feet of snow fencing were erected and 7,948 feet rebuilt.

Repairs were made to about 25,000 feet more of the old fence.

It is expected that the sheds with iron frames and close boarding will be almost if not quite fire proof.

WHARVES AND COAL TRESTLES.

At the DEEP WATER TERMINUS, HALIFAX,—some new piles were put in and the foundation of freight sheds strengthened.

At RICHMOND—a contract was entered into with Messrs. Connor and Donald for the rebuilding of the outside wharf with piling.

The piles under all buildings to be creasoted.

The renewal of the high level coal trestle and chute is also included in their contract.

The work was about half completed at the close of the year.

At PICTOU LANDING—a portion of the top of wharf No. 2 was renewed and the wharf was generally overhauled and repaired.

At SPRING HILL—the old shed for coaling engines at this place was destroyed by fire and a new coal shed and trestle were erected to replace it.

At AMHERST, DORCHESTER, SHEDIAC AND SUSSEX—new coal trestles for local purposes were erected.

At POINT DU CHENE—large repairs were made to the outside wharf and a portion of the old top was replanked.

At MONCTON—large repairs were made to the railway coal shed and trestle.

At NEWCASTLE—the old wharf was burned to the water's edge. It was rebuilt by contract. It was also fitted with a new and improved derrick of 7 tons capacity.

At DALHOUSIE—a portion of the top of wharf was replanked.

At STE. FLAVIE—a new coal shed 500 feet long, 25 feet wide, with a trestle approach 700 feet long was erected by contract at a cost of \$4,336.50.

At RIMOUSKI—necessary repairs were made to the wharf pending the letting by contract of further larger repairs.

At POINTE LÉVIS—necessary repairs were made to the cribwork between Lévis and Pointe Lévis and also to the cribwork south of Pointe Lévis.

BUILDINGS AND PLATFORMS.

At HALIFAX a double floor was laid in the north side of freight shed on the Deep Water Wharf through its whole length.

The outside passenger platform at the North Street station was renewed.

The roof of head house was re-covered with Sparham roofing.

The grain elevator was overhauled and repaired, and the roof of boiler house was re-covered with tar and gravel.

One side of the roof of North Street freight house re-shingled and the top of loading platform outside of shed was renewed.

At RICHMOND—one end of the stores building (brick), was repaired and covered with mastic.

The round house was thoroughly overhauled, all soft brick removed and a large portion of the exterior walls covered with mastic.

An extension was made to building over ash pit adjoining round house, to admit of the largest class of locomotives more conveniently taking coal whilst discharging their ashes.

A new door was put in the local cattle shed.

At ROCKINGHAM—a portion of the passenger platform was renewed.

At BEDFORD—necessary repairs were made to the station building and about one-half of the old platform was renewed.

WELLINGTON, ENFIELD AND SHUBENACADIE—stations were painted two good coats best lead and oil.

At the latter station new sills were put under the baggage room and the roof was re-shingled.

At TRURO—new floors were laid in the District Superintendent's and ticket offices and a portion of the roof of station was re-shingled.

The roof of engine house was re-covered with Sparham cement. A large portion of the woodwork of the ventilators was also renewed.

The old iron smoke stacks were replaced with heavy terra cotta pipes, 18 inches in diameter, fitted with hoods or caps of a similar material.

The stringers on six of the pits were renewed

The platform in front of the freight house, 150 feet long by 14 feet wide, was renewed

At VALLEY—the roof of station was re-shingled and repairs made to building and platform.

A loading platform 85 feet long by 8 feet wide was put up at Murray's siding, about one mile west of Valley.

At WEST RIVER—a bay window was put in office, new sills were put under station and general repairs made.

At LORNE'S SIDING—two and a-half miles east of Glengarry, a new loading platform, 90 feet long by 8 feet wide, was erected.

At STELLARTON—the front and end rails, roof and platform of new brick cased station were badly damaged by an explosion. The necessary repairs were made.

At NEW GLASGOW—the station master's office was enlarged and general repairs made to station and platform.

At BELMONT, WESTCHESTER, OXFORD and SACKVILLE—small coal sheds for the use of stations were erected.

At WENTWORTH—the freight house was raised and the roof shingled.

At WESTCHESTER—a new platform was erected.

Platforms at SPRING HILL, AMHERST, AULAC, SACKVILLE, ROCKLAND and MEMRAMCOOK—were overhauled and partially renewed.

At GRENVILLE—an addition was made to the dwelling apartments of the station master.

AT SALT SPRINGS—the roof of station was shingled.

At AMHERST, AULAC, SACKVILLE and MEMRAMCOOK—new hard wood floors were laid in officers and waiting rooms.

The following buildings were painted on the Central Division: Belmont Station, Wentworth freight house, Napan Station and freight house, Amherst Station baggage room and dining saloon, Sackville and Rockland Stations.

At POINT DU CHÊNE—the roof of engine house was renewed with Sparham cement

The station master's dwelling was overhauled, repaired and painted and the station platform repaired and partially renewed.

At SHEDIAC—new hard wood floors were put in the office and waiting rooms. The building was thoroughly overhauled, repaired, shingled and painted.

At HUMPHREY'S MILL SIDING—a new loading platform, 190 feet long by 18 feet wide, was erected.

At MONCTON—a new brick blacksmith's shop, 156 by 52 feet, was erected and additions of 250 by 67 feet and 300 by 22 feet were made to the paint shop.

The station was thoroughly overhauled, repaired and the roof re-shingled.

The station, dining room and ice house were painted.

The roof of ice house was also shingled.

New floors were laid in the waiting rooms and ticket office.

The office in the freight house was enlarged and remodelled, the walls and ceiling were sheathed with wood and a new hard wood floor was laid.

Necessary repairs were made on the twelve tenement houses.

Two buildings at the rear of the machine shop had to be removed to make room for the new blacksmith shop. When this was done they were put in good repair.

At SALISBURY—necessary repairs were made to the station and the roof re-shingled.

At PETITCODIAC—the roof of freight house was re-shingled.

At SUSSEX—the office in the freight house was overhauled, lined and filled with sawdust.

NAUWIGEWAWK, RIVERSIDE and COLDBROOK stations were overhauled and painted.

A new loading platform was erected at the latter station.

At ROIHESAY—a new hard wood floor was put in the general waiting room and office.

The platform at BISHOP'S SIDING was overhauled and partially renewed.

ST. JOHN—In April last a fire badly damaged the large general freight shed. The offices were gutted; the roof and covering were badly damaged; more than one half of the windows and doors were destroyed.

The necessary repairs were made.

At BERRY'S MILLS—the platform was renewed and the roof of dwelling apartments re-shingled.

At CANAAN—a roof was reshingled and part of the platform renewed.

At ADAMSVILLE—a new passenger station and platform were erected.

At WELDFORD—a new baggage room was built at the east end of freight house.

The agent's dwelling was thoroughly overhauled, repaired and painted.

The station platform was renewed and the loading platform recovered.

At KENT JUNCTION—the station and platform were repaired. The former was painted. A large addition was made to the freight house.

At ROGERSVILLE—a fire partially destroyed the old station. A portion of the exterior walls and roof were available for a new and much larger station that was erected.

The platform was renewed and lengthened.

At BEAVER BROOK—the station was repaired and painted.

At BARTIBOGUE—The roof and floors of station were repaired.

At RED PINE—the station was thoroughly repaired and painted.

A pump house was erected for stationary engine to supply 50,000 gallon tank.

At BATHURST, PETIT ROCHER, JACQUET RIVER, NEW MILLS and CHARLO—necessary repairs were made to stations and platforms.

The latter three stations were painted.

At EEL RIVER—a new floor was laid in the office, and the platform lengthened and the old portion of it renewed.

At PETIT ROCHER, BELLEDUNE and CHARLO—new loading platforms were erected.

At DALHOUSIE JUNCTION—the station was repaired and painted. A new floor was laid in the general waiting room.

At CAMPBELLTON—the station and dining saloon were repaired and painted. New floors were laid in the carpenter's and machine shops.

At FLAT LANDS—8 miles north of Campbellton, a new station, platform and coal house were erected.

At PLEASANT BEACH—7 miles south of Causapsca, a new station, platform and coal house were erected.

At SALMON LAKE—5 miles north of Causapsca, a new station, platform and coal house were erected.

At AMQUI—the station was repaired and painted.

At SAYABEC—the station was repaired and painted. A hard wood floor was laid in the waiting-room and office.

At BERNIER'S SIDING—a new station, platform and coal house were erected.

At STE. FLAVIE—the station received large repairs and was painted.

The platform was renewed and the floor and pit timbers in round house were renewed.

Several new terra-cotta smoke-stacks were put in place of rusted iron ones.

Tank-houses at Metapedia, Mill Stream, Causapsca, Amqui and Cedar Hall, received necessary repairs.

At STE. LUCE—the station was repaired and painted; the platform was renewed.

At SACRÉ COEUR—a station and platform were erected.

At ST. SIMON, ST. ARSÈNE and TROIS PISTOLES—the stations and platforms received necessary repairs. At the latter place the platform was renewed and an ice house built for the use of the dining saloon.

At ST. ELOI—the station was repaired and platform extended.

At RIVIÈRE DU LOUP—an oil house for the use of the stores department was provided. The station, engine house and train despatcher's office received necessary repairs.

An office for clerks was fitted up in the freight house.

At ST. ALEXANDRE—the roof of freight house was reshingled.

At CAP ST. IGNACE—extra land was purchased and a new station was erected. The old station was moved and converted it to a freight house.

A coal house and water closet were provided and a good road approach made to the station.

At ST. THOMAS—necessary repairs were made to the station and freight shed.

At ST. PIERRE—a loading platform was erected.

At ST. FRANÇOIS—a new coal house was erected.

At CHAUDIERE JUNCTION—necessary repairs were made to a number of tenements occupied by railway employees.

At HADLOW—the coal shed was repaired and the doors of engine house renewed.

The wood work of brick cased stations at St. Paschal, St. Pierre, St. François and St. Charles was painted.

BRIDGES AND CULVERTS.

A 4 by 2½ masonry box culvert, 60 feet long, was put in near Windsor Junction to prevent the overflow of R. Adam's field.

A new pier of cut free stone was built under the Shubenacadie bridge in place of an old rubble pier that had become unsafe. Another pier of this bridge and abutments were repaired and pointed with cement.

Two piers and abutments of iron bridge at Riversdale were repaired and pointed.

An arch culvert one mile east of Stellarton was pointed, and another one in Stellarton yard extended 25 feet to admit of another track being laid to new station.

The iron superstructure of Shubenacadie bridge (box girders, 325 feet long) were thoroughly scraped and painted inside and out.

An overhead bridge at this place was also scraped and painted.

At the Experimental Government Farm, near Nappan, an old wooden overhead trestle bridge was replaced with an iron bridge of 90 feet clear span, resting on stone abutments.

One of the piers of Sackville bridge was badly damaged by running ice in the spring of 1887.

A crib work of timber filled with stone was built around it from the foundation to high water mark at a large cost. The cut waters at either end were faced with old rails. Last winter's experience goes to show that no further trouble may be expected.

An old wooden trestle bridge of 3 spans, 30 feet, at Humphrey's Mill Brook, was replaced with iron trestles and plate girders. Stone abutments were also built and the old piers partially rebuilt and pointed.

Wooden stringers at Holme's Brook were renewed and replaced with rail girders, 18 feet clear span.

A wooden bridge at Hayward's Mill Brook was replaced with steel girders of 33 feet span.

Two pairs of old rail girders, 15 feet span, replaced wooden stringers at Pallet River and Cold Brook.

Two overhead bridges near Quispamsis were repaired; the floor of one of them was renewed.

The iron bridge at Gondola Point (30 feet span) was raised and provided with a standard timber floor.

Guard rails were put on two spans (86 feet each) of Petitcodiac iron bridge—

Additional lateral bracing was provided for the following iron bridges:—

1st Crossing, Barnaby River.....	1 Span.	100 Feet.
Bartibogue.....	1 do	80 do
Nepisiguit.....	6 do	100 do
Tête-à-Gauche..	5 do	100 do
Grant's Brook.....	1 do	80 do
Mill Stream.....	1 do	80 do

The above named bridges were overhauled and all loose rivets replaced,

The following bridges were scraped and painted:—

Konchibouguacis.....	1 Span.	80 Feet.
3rd Crossing, Barnaby River.....	1 do	80 do
2nd do do	1 do	80 do
Bartibogue.....	1 do	80 do
Red Pine.....	3 do	40 do
Nepisiguit.....	6 do	100 do
Little River	1 do	60 do
Middle River.....	2 do	80 do
Mill Creek.....	3 do	60 do
Moffat's.....	8 do	60 do
Gordon's.....	1 do	40 do
McKinnon's Brook.....	2 do	80 do
Tartague River.....	1 do	40 do
Metis River.....	4 do	100 do
3 small girders between St. Flavie and Rimouski	27 do	
Bennett's.....	1 do	50 do

The old cross ties on the Miramichi and Restigouche bridges (17 spans of 206 feet each) were replaced with standard floors and guard rails of Georgia pine at a large cost.

Extra floor timbers were put on deck spans of Richibucto, Konchibouguacis and Barnaby River.

New floor beams and stringers were put on 24 spans between Newcastle and Campbellton.

An underbridge with stone abutments and iron girders was erected in Bathurst yard.

The old cross ties were removed and replaced with standard timber floors on the following bridges:—

Clarke's Bridge.....	1 Span	60 feet
Kane's do	1 do	20 do
Gilmour's do	1 do	60 do
Cedar Hall do	1 do	30 do
Causapsal do	3 do	100 do
West St. Thomas Bridge.....	9 do	60 do

Nine new masonry culverts were rebuilt between Rivière du Loup and Chaudière Junction.

GENERAL.

About a half mile of double track was laid at Dalhousie Junction to connect the branch with the yard.

At New Glasgow, a double track was laid from the Junction of the Eastern Extension with main line to a road crossing in the town where a flagman is kept so that he could act as switchman as well as flagman.

About two miles of side ditching was done between Nappan and Memramcook and four miles between Rivière du Loup and St. Thomas.

[1888]

Necessary repairs were made to turntables at Richmond, Truro, Moncton, New-castle, Rivière du Loup and Hadlow.

A large quantity of rip-rap was put in to protect the masonry of Sussex and St. Paschal bridges.

A stone ash pit 60 feet long with necessary connecting drains was built at St. Flavie outside of engine house.

SNOW PLOUGHS AND FLANGERS.

Numbers 3, 23 and 54 were rebuilt. Large repairs were made on Nos. 9, 11, 17, 19, 24 and 30.

Flangers Nos. 1, 10, 11 and 19 were repaired and painted.

BRANCH LINES.

Pictou Town Branch.

The contract for grading the Pictou Town Branch referred to in my report for 1887 was completed, and the branch opened for traffic on the 17th of November last.

Siding accommodation has been provided on this branch as follows:—

	Feet.
At Stellarton.....	10,352
Drummond Crossing.....	4,100
Westville.....	2,577
Sylvester Station.....	1,007
Pictou.....	5,649
Total.....	23,685 feet=4½ miles.

The coal dust used last year as ballast would not hold up the track in cuttings, and about 8,000 yards of ashes and cinders were put on the track this year. Before the line is in first class order it will have to have a light lift of good gravel ballast.

Suitable distance and station signals have been provided at Pictou, Sylvester, Westville and Stellarton.

Wrought iron turntables 55, feet in diameter, have been provided at Stellarton and Pictou.

Considerable progress was made in filling the water lot provided by the local authorities for station ground at Pictou.

A contract was entered into for the extension of the newly acquired wharf.

Very little progress was made on account of the non-delivery of the creasoted piling.

A large baggage room was built at Pictou, also a loading platform for horses and cattle and for freight being received from and shipped to Prince Edward Island.

The old station on the railway wharf was moved north about 100 feet, turned around, and converted into a suitable freight shed.

It was thoroughly overhauled, painted, shingled and placed on a stone foundation.

I have the honor to be, Sir,

Your obedient servant,

P. S. ARCHIBALD,

Chief Engineer.

D. POTTINGER, Esq.,
Chief Superintendent,
Moncton.

 INTERCOLONIAL RAILWAY.

OFFICE OF THE MECHANICAL SUPERINTENDENT,

MONCTON, N. B., 22nd September, 1888.

DEAR SIR,—I beg to submit for your information the following statements of the operations of the Mechanical Department for the year ending 30th June, 1888.

A.—Statement showing the number of locomotives, and various classes of cars.

B.—Statement showing the locomotive and car mileages, and the average number of passenger and freight cars hauled per mile run by engines.

C.—Abstract of locomotive returns.

D.—Statement of the cost of locomotive power for each month during the year.

E.—General statement of the expenses of the Mechanical Department.

During the year three sleeping cars of the latest and most approved design, fitted with electric lights, 106 box cars, 8 platform and 148 twenty-ton coal cars were purchased at cost of capital and added to the rolling stock of the road.

Four locomotives were purchased and charged to revenue, to replace four condemned. There were also built at cost of revenue one sleeping, one second-class, three postal and smoking, two baggage and express, one van, twenty box, ninety platform, forty-four hopper and three 20-ton coal cars.

The box and platform cars rebuilt were of twenty tons capacity, replacing those of only ten tons, and the hopper cars were built six instead of five tons capacity.

Eleven first-class cars, fifteen second-class, five postal, three baggage and three vans have been thoroughly overhauled and strengthened in the framing, and improved generally.

Twelve refrigerator cars have been fitted with air brakes and steam pipes to enable them to be used on steam-heated passenger trains.

Three sleeping cars, six first-class, four second-class, two postal and three baggage were fitted with electric lights; two sleeping, eight first-class, seven second-class, four postal and five baggage cars were fitted with steam heating devices. Fifteen locomotives were also supplied with equipment to supply steam to trains for heating purposes.

One hundred and eleven box, 136 gondolas and flat cars and twelve refrigerator cars have had extensive repairs, almost amounting to rebuilding, and have been strengthened to carry a load of 34,000 pounds instead of 20,000 pounds as formerly. Thirty-eight passenger cars have been painted and varnished; 297 freight cars of various kinds were repainted.

Nineteen locomotives had new extension smoke-boxes, five had new tenders thirty-nine had new cylinders, four new fire boxes, and sixteen new caps.

The rolling stock generally is in good condition.

WATER SERVICE.

Extensive repairs and additions have been made to the water service, at the cost of working expenses.

At HADLOW—section pipe repaired, and new cover put on well at river.

At STE. ANNE—tank and house burned, a tank was put up for temporary use, and a new fifty thousand gallon tank erected, eleven hundred feet 2½ inch pipe laid, and a pumping engine and boiler put up.

At RIVIERE DU LOUP—trestle under one of the tanks repaired.

At ISLE VERTE—a new boiler was put in.

At ST. FABIEN—the tank here becoming old and not large enough to meet the requirements of the traffic, the right of way to the stream near there was purchased, a fifty thousand gallon tank put up, three hundred and thirty-five feet 2½ inch pipe laid, a steam pump supplied and a pump house erected.

At STE. FLAVIE—seven hundred and twenty feet 2 inch pipe laid here, from tank to ash pit.

At CEDAR HALL—reservoir rebuilt.

At CAUSAPSCAL—reservoir rebuilt and fenced.

At ASSAMETGUAGHAN—repaired reservoir, and covered with plank.

At MILLSTREAM—repaired reservoir.

At CAMPBELLTON—cleaned out reservoir, and repaired main pipe.

At DALHOUSIE—rebuilt reservoir.

At JACQUET RIVER—rebuilt reservoir, and excavated five hundred feet of ditch to conduct water from spring to reservoir.

At BATHURST—repaired trestle under old tank.

At RED PINE—the tank at this place was burned in February, 1887, a fifty thousand gallon tank, eleven hundred feet 2½ inch pipe, and a steam pump were furnished to take its place.

At NEW CASTLE—reservoir and main pipe repaired.

At CALHOUNS—reservoir rebuilt.

At GLENGARRY—New trestle under tank, and new hand pump supplied.

At STELLARTON—waterpipe repaired.

At PICTOU LANDING—reservoir rebuilt and a second-hand tank put up.

At PETITCODIAC—a fifty thousand gallon tank erected here, to replace the small old one which had become useless.

At HAMPTON—a fifty thousand gallon tank has been put up here, as the old water supply is insufficient, a new source has been arranged for, and the pipe is now being laid.

The service at other stations has been kept in good order.

I have the honor to be, Sir,

Your obedient servant,

H. A. WHITNEY,

Mechanical Superintendent.

D. POTTINGER, Esq.,
Chief Superintendent,
Moncton.

A.—INTERCOLONIAL RAILWAY.

STATEMENT showing the number of Locomotives and the various classes of Cars on the 1st July, 1887, and on the 30th July, 1888.

	The Various Classes of Cars.														Total.						
	Locomotives.	First Class Sleepers	Second Class Sleepers	Parlor.	First Class Passenger.	Second Class Passenger.	Postal and Smoking.	Barriage & Express.	Vans.	Box.	Cattle.	Platform, 10, 15 and 20 tons.	Hoppers, 5 & 6 tons.	Gondolas, 20 tons.		Coal Cars, 20 tons.	Total.	Snow Plough.	Wing Plough.	Flangers.	Total.
On hand, 1st July, 1887, serviceable.....	164	9	6	2	68	74	17	26	81	1,452	68	1,432	695	776	566	5,272	31	10	20	61	
do do condemned.....		1			1	2			2	5	4	10			1	26					
Total.....		10	6	2	69	76	17	26	83	1,457	72	1,442	695	776	567	5,298	31	10	20	61	3
Purchased on capital account.....		3								106		8			148	265				3	
Changed from flanger to plough.....																					
On hand, 30th July, 1888.....	164	13	6	2	69	76	17	26	83	1,563	72	1,450	695	776	715	5,563	37	10	17	64	
do do condemned.....		1			1	2			2	5	4	10			1	26					
Total.....		14	6	2	70	78	17	26	85	1,568	76	1,460	695	776	716	5,589	37	10	17	64	3
Condemned, 1st July, 1887.....																					
Condemned during year.....	4					3			4	17	4	94	44	32	11	210				3	
Total condemned.....	4					3			4	17	4	94	44	32	11	210				3	
Less—Rebuilt.....	4					1			1	20		90	44		3	163				*3	
Total on record.....																					
Add—Serviceable and repairing.....	164	13	6	2	68	75	17	25	78	1,561	64	1,436	695	744	706	5,490	37	10	17	64	
Total on record.....	164	13	6	2	69	76	17	26	83	1,563	72	1,450	695	776	715	5,563	37	10	17	64	

* Ploughs instead.

J. SUTTON,
Mechanical Accountant.

MONCTON, N.B., 30th June, 1888.

B.—INTERCOLONIAL RAILWAY.

STATEMENT OF Locomotive and Car Mileage for Year ending 30th June, 1888.

Months.	Locomotive Mileage.		Car Mileage.						
	Passenger.	Freight.	Passenger.	Express Postal and Baggage.	Freight.	Total.	Snow Plough Mileage.	Average Freight	Average Passenger
1887—July	83,706	311,272	432,082	173,680	3,858,496	4,464,258	442	646	12.39
August	91,127	292,585	439,005	171,064	3,966,577	4,576,646	.....	679	13.55
September	81,519	267,531	399,449	158,765	3,814,537	4,372,741	.....	685	13.27
October	77,032	325,770	336,838	169,306	4,282,151	4,778,293	.....	638	13.14
November	77,130	319,348	346,721	154,404	4,338,526	4,739,651	892	649	13.27
December	73,819	352,472	331,245	165,469	4,285,455	4,782,169	6,231	672	12.15
1888—January	72,639	339,639	289,327	147,452	3,676,470	4,113,249	25,929	1	11.16
February	70,391	352,808	290,669	144,962	4,082,534	4,518,165	20,815	618	11.56
March	75,471	412,967	337,348	159,848	5,242,321	5,739,517	12,281	668	12.39
April	77,242	359,074	395,253	157,543	4,694,352	5,247,148	1,288	705	13.07
May	74,770	330,755	359,266	154,223	4,297,651	4,811,240	329	657	12.93
June	86,992	304,174	392,792	176,426	3,896,635	4,465,853	.....	654	12.85
Total	951,838	3,976,415	4,350,099	1,923,132	50,336,705	56,618,937	67,937	659	12.62

[1888]

J. SUTTON, Mechanical Accountant.

MONCTON, N.B., 30th June, 1888.

C.—INTERCOLONIAL RAILWAY.
 ABSTRACT of Locomotive Returns for the Year ending 30th June, 1888.

Months.	Hours in Steam.	Locomotive Mileage.	Consumption.			Average Consumption per 100 Miles.					
			Tons of Coal.	Pints of Oils.	Pounds Tallow.	Pounds Waste.	Miles Run to hour in Steam.	Pounds Coal.	Pints Oil.	Pounds Tallow.	Pounds Waste.
1887—July	45,174	474,336	12,215	33,610	14,837	8,369	10.50	5,979	7.09	3.13	1.75
August.....	44,058	455,223	12,329	29,667	15,748	8,445	10.33	6,066	6.51	3.47	1.84
September.....	43,493	442,019	12,302	26,514	14,810	7,996	10.16	6,234	5.64	3.36	1.80
October.....	47,261	478,167	13,434	27,213	16,234	8,870	10.11	6,293	5.69	3.39	1.83
November.....	47,157	474,689	13,867	27,107	14,352	8,775	10.06	6,543	5.71	3.02	1.86
December.....	52,654	512,145	15,553	30,027	17,769	9,984	9.72	6,802	5.86	3.46	1.91
1888—January	55,725	507,665	15,637	32,672	14,133	9,178	9.11	6,899	6.43	2.78	1.80
February.....	57,723	526,732	16,489	37,983	17,344	9,605	9.13	7,006	7.09	3.29	1.81
March.....	65,007	607,310	18,504	43,090	19,241	11,487	9.34	6,802	7.09	3.16	1.89
April.....	51,150	515,753	14,590	35,259	14,232	9,954	10.08	6,350	6.83	2.75	1.92
May	46,976	481,573	12,624	33,429	11,854	9,503	10.25	5,872	6.94	2.46	1.96
June.....	43,861	460,423	12,137	34,199	12,420	9,546	10.49	5,904	7.43	2.69	2.07
Total	600,238	5,936,035	169,681	390,170	182,974	111,670	9.89	6,403	6.57	3.03	1.83

[1888]

J. SUTTON,
Mechanical Accountant.

MONOTON, N. B., 30th June, 1888.

D.—INTERCOLONIAL RAILWAY.

STATEMENT of the cost of Locomotive Power for each month, from 1st July, 1887, to 30th June, 1888.

Months.	Miles run by Engines.	Mechanical Supt's Salary and Office Expenses.	Engine-men's wages.	Fuel.	Oil, Tallow and Waste.	Repairs to Engines, Tenders and Tools.	Water.	Miscellaneous, including Engine-houses.	Total.	Average per 100 Miles.							
										Mechanical Supt., &c.	Wages.	Fuel, Oil, Tallow and Waste.	Repairs.	Water.	Miscellaneous.	Total.	\$	c.	\$	c.
1887—July.	474,356	888 39	17,819 83	34,160 17	4,042 76	24,700 74	2,243 51	2,802 33	88,657 83	19 3	76 7	20 0	85 5	20 0	47 0	59 18	26
Aug..	455,223	823 53	17,901 07	35,040 19	4,113 08	23,380 12	2,172 61	2,941 62	86,382 22	18 3	94 7	20 0	91 5	13 0	47 0	64 18	97
Sept..	442,019	897 63	17,366 04	35,037 77	3,626 79	27,854 70	2,235 07	2,734 09	89,742 09	20 3	93 7	20 0	82 6	30 0	57 0	62 20	30
Oct ...	478,167	978 73	18,377 43	37,918 82	3,970 50	30,304 61	2,542 51	2,898 87	96,591 10	20 3	84 7	20 0	83 6	33 0	51 0	61 20	26
Nov...	474,689	919 96	18,417 65	38,773 88	3,876 58	22,863 90	7,238 79	3,378 11	95,289 07	19 3	88 3	18 0	81 1	78 1	52 0	70 20	07
Dec...	512,145	897 15	19,094 39	42,526 73	4,337 73	16,681 44	7,312 73	4,487 55	95,237 71	17 3	75 3	20 0	85 3	26 1	41 0	87 18	59
1888—Jan ...	507,665	926 50	19,765 13	44,141 39	4,345 95	24,258 39	3,268 22	4,878 75	101,664 33	18 3	90 8	20 0	86 1	78 0	64 0	96 20	01
Feb ...	526,732	803 18	21,268 46	46,769 27	4,806 43	24,395 85	3,788 24	5,598 84	107,430 27	15 4	03 8	20 0	88 0	91 4	64 0	72 1	06
March	507,310	836 62	23,277 51	51,046 50	5,272 82	31,162 87	4,114 97	4,254 16	119,955 55	14 3	63 8	20 0	87 5	41 0	87 5	68 0	78
April	515,753	808 43	21,478 38	40,639 15	4,500 36	31,035 12	2,026 08	3,944 46	104,481 98	16 4	16 7	20 0	89 0	87 6	01 0	39 0	77
May...	481,573	848 93	20,452 69	35,751 29	4,514 03	21,583 00	2,222 39	2,866 17	83,238 50	18 4	25 7	20 0	94 0	48 0	46 0	59 18	32
June..	460,423	817 27	19,464 27	21,749 66	4,228 68	22,179 30	1,387 41	3,607 36	63,333 95	18 4	23 4	20 0	72 0	92 3	64 0	20 0	78
Total.	5,936,035	10,456 26	234,682 95	463,604 82	51,635 80	290,220 04	40,452 73	44,293 31	7,135,325 00	18 3	95 7	20 0	87 4	89 0	68 0	73 19	13

[1888]

J. SUTTON,
Mechanical Accountant.

MONCTON, N. B., 30th June, 1888.

E.—INTERCOLONIAL RAILWAY.

GENERAL STATEMENT of the Expenses of the Mechanical Department, for the Year ending 30th June, 1888.

	s.
The miles run by trains.....	,939,253
do engines.....	5,936,035
do cars.....	56,608,930
do snow ploughs.....	67,937
The cost of locomotive power.....	\$1,135,325 00
The cost of car repairs:	
Repairs to passenger cars.....	\$ 102,375 31
do postal, express and baggage cars.....	47,828 95
do freight cars and vans.....	254,493 65
Oil and waste for packing.....	36,703 85
Miscellaneous.....	1,218 59
Total cost of car expenses.....	\$ 442,620 35
The cost of locomotive power per 100 miles run by trains.....	22 97
do do do engines.....	19 13
do do do cars.....	2 00
The cost of repairs to cars per 100 miles run by train.....	8 19
do do engines.....	6 82
do do cars.....	0 71
The cost of oil and waste for packing per 100 miles run by trains.....	0 74
do do engines.....	0 61
do do cars.....	0 06
The cost of repairs to passenger cars per 100 miles run by them.....	2 35
do postal, express and baggage do.....	2 48
do freight cars and vans do.....	0 50

J. SUTTON,
Mechanical Accountant.

MONCTON, N.B., 30th June, 1888.

[1888]

INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada on the

Date.	Time of Day.	Number of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1887.						
July 1...	11.00	Special	Freight	J. A. Davidson	J. Stewart	155
do 3...	6.35	9	Express	A. W. Melick.....	H. Tait	68
do 7...	23.30	Special	Passenger	E. Cannie	D. McNeil	158
do 12...	21.00	12	Freight	A. W. Melick	S. Watson	43
do 13...	1.40	Special	do	W. Morgan	J. McAulay	155
do 16...	11.30	do	do	J. Barnhill.....	A. Sproule.....	8
do 22...	10.00	.....	Shunting.....	.....	H. Corns.....	23
do 30...	12.00	.....	Freight	Geo. Sears	N. McLean	40
do 31...	24.30	.....	do	Nap. Bernier.....	P. N. Michaud	143
do 31...	24.30	.....	do	do	do	143
Aug. 1...	15.30	46	Accommodation.	Geo. Levesque.....	E. Parsons	17
do 3...	9.20	Special	Working	W. Welling	J. Devens.....	110
do 4...	16.25	do	Freight.....	Geo. Lears.....	Jas. Cooke..	89
do 9...	20.30	9	Express .....	.....	.....	.....
do [12...	7.00	14	Accommodation.	W. H. Donkin	Jas. McDonald.....	55
do 18...	.....	.....	.....	.....	.....	.....
do 17...	5.40	3	Accommodation.	B. White.....	J. R. Moore	46
do 27...	15.00	.....	Shunting .....	.....	R. Wilson	12
do 28...	1.30	Special	Freight.....	W. McClafferty.....	A. Sproule.....	22
Sept. 29...	19.40	34	Express.....	Z. Lockhart	B. Luty.....	147

RAILWAY.

Line of the Intercolonial Railway, during the Year ended 30th June, 1888.

Place of Accident.	Name of Person Injured.	Whether Passenger or Employé.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
Red Pine	J. Stewart.	Employé .	Fell off engine.....	Arm broken	
Near Hampton...	P. Francis (Ind.)	Neither ...	Found on track with head cut.	Fatal.....	Accidental.
Lause à Gile.....	Jean Landry ...	Passenger	Fell off train while in motion.	do.....	No inquest.
Sussex	Michael Cronan	do ...	Attempting to get on train in motion.	do.....	Accidental.
Moncton.....	W. H. Wilber...	Employé .	Fell from top of car.....	Head cut.....	
Pictou Landing.	Unknown	Neither ...	Jumped from engine while stealing ride.	Face bruised.....	
St. John.....	W. Lockhart ...	Employé .	While coupling	Finger crushed..	
Hampton.....	— Barnes (boy)	Neither ...	Jumping on cars, was run over.	Seriously injured	
St. Moise.....	J. B. Scivis.....	Employé .	Collision with special train.	Slightly do	
do	Oliver Blier.....	do ...	do do	do do	
St. Charles.....	Aug. Dionne ...	Passenger	Attempting to get on train in motion.	Leg do	
{ Penobscues Ballast Pit...}	W. Dunbrack...	Employé .	Helping to load steam shovel, was struck by falling derrick.	Fatal	do
{ Sackville....}	O. Hoar (boy)..	Neither ...	Jumping on cars, was run over.	do	do
Painsec.....	G. P. King (boy)	do ...	Attempting to cross track, was struck by engine.	do	do
Truro.....	J. F. McElheney	Employé .	Fell while transferring baggage.	Thigh injured...	
Elmsdale	W. H. Donkin.	do ...	Slipped while handling freight.	Back do ...	
Folleigh.....	D. McPherson.	do ...	Slipped while stepping from trolley.	Ankle broken...	
Point du Chene.	Jas. Cole	do ...	While coupling	Finger crushed...	
Truro	J. Cummings...	do ...	do	do do ...	
Near Elmsdale...	D. McDonald...	do ...	Lifting spring, &c., on train.	Back injured....	
Dalhousie J'ct...	W. Gardner...	do ...	While transferring baggage.	Hand crushed...	

INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada

Date.	Time of Day.	Number of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1887.						
Sept. 2...	16.00	Special.	Working	H. Paneau	Jas. Howie..	52
do 7...	19.00	do	Freight	W. Morgan..	Jas. McAulay.....	149
do 9...	9.00	do	do	C. B. Humphrey	D. McQuarry	113
do 10...	19.00	do	do	W. Welling.....	J. Gratton	122
do 13...	20.55	9	Express	Jas. William.....	Jno. Ross.....	157
do 16...	11.10	49	Freight	J. Guay	F. Gosselin.....	21
do 20...	14.30	Special.	do	Geo. C. Keys	N. Cummings.....	172
do 22...	14.00	.....	.....	.....	.....	.....
do 25...	5.15	Special.	Freight	W. Crockett.....	D. Taylor.....	73
do 15...	20.30	do	do	A. Bernier.....	W. Duncan	142
do 22...	13.40	do	do	J. L. Hebert.....	L. Duncan.....	142
do 22...	13.40	do	do	do	do	142
do 22...	13.40	do	do	do	do	142
do 22...	13.40	42	Accommodation.	D. Morin	H. Gorham.....	107
do 22...	13.40	42	do	do	do	107
do 24...	Night	.....	.....	.....	.....	.....
do 27...	14.45	37	Freight.....	D. Hunter	J. Stratton	144
do 29...	.....	.....	.....	.....	.....	.....
Oct. 1...	.....	.....	.....	.....	.....	.....
do 5...	.....	.....	.....	.....	.....	.....
do 4...	3.00	Special.	Freight	S. Nickerson.....	P. McKenna	125
do 6...	6.55	39	do	M. Cummings.....	J. Morton.....	29
do 10...	16.00	.....	Shunting.....	.....	Geo. Currie	93
do 11...	10.00	Special.	Freight.....	Geo. C. Keys.....	John Edwards	62
do 18...	7.00	.....	Shunting.....	.....	P. Fogarty.....	101
do 18...	8.00	.....	do .....	.....	John LaBoute	97
do 19...	20.00	.....	do .....	.....	Chas. McHugh.....	18
do 20...	7.30	Special.	Freight.....	A. C. McLean	F. Miller.....	167

RAILWAY.

on the Line of the Intercolonial Railway, &c.—Continued.

Place of Accident.	Name of Person Injured.	Whether Passenger or Employé	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
Rogersville	Mel Tracy.....	Employé .	While applying brake. ...	Back injured.....	
Quispamsis.	G. Thompson...	do ...	While coupling.....	Finger do ...	
Newcastle	Isaac King.	do ...	do	do do ...	
Spring Hill J'ct.	Chas. Wilson...	do ...	do	do do ...	
Truro.....	Jas. Gaston.....	Neither ...	Fell while getting off train.	Fatally injured..	Accidental.
St. Paschal.....	A. Coubron	Employé .	While coupling, was run over.	Leg cut off.....	
New Glasgow....	A. McPherson. .	do ...	Fell off car	Wrist broken....	
Richmond	Wm. Payne	do ...	Unloading car of axles...	Fingers crushed.	
Gloucester J'ct.	A R Leblanc. .	do ...	While coupling	do do ...	
Causapsal.	H. Bastille.	do ...	While applying brake, fell between cars.	Seriously injured	
Little Metis.....	L. Duncan	do ...	Collision with No.42 train	Fatal	do
do	Alex Grant.....	do ...	do do	Seriously injured	
do	Naz. Beaulieu. .	do ...	do do	Knee do	
do	H. Gorham	do ...	Collision with special train.	Leg broken.....	
do	A. McAllister. .	do ...	do do	Slightly injured.	
Moncton.....	Eliza Bailey....	Neither ...	Found lying on track....	Fatal	Accidental.
Bathurst.....	Geo. McGuire..	Employé .	While coupling.....	Finger crushed..	
Wentworth.....	Neil Purdy	Neither ...	Loading piling on car....	Fatal	No inquest.
Rogersville.....	Maud Miller....	do ...	Found on side of track...	do	Accidental.
Dalhousie Junc.	A. Campbell....	do ...	Jumping between cars....	Arm broken.....	
Moncton.....	J. Harvey.....	Employé .	While coupling.....	Thumb injured..	
Bartibogue.....	Peter Young....	do ...	Struck by train	Seriously injured	
Richmond	A. Drysdale....	Neither ...	Fell off hopper car	Arm dislocated.	
Stellarton	John Spain....	Employé .	While coupling.	Leg broken.....	
Moncton.....	Jas. Arburg....	do ...	Stepping on engine.....	Shoulder injured	
Rivière du Loup	Jos. Canchon...	do ...	While coupling.....	Hand crushed...	
Moncton.....	Wm. Lockart...	do ...	do	Fingers do ...	
Westville	J. Whalley.....	do ...	Telephone post fell on him	dead cut.	

INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada

Date.	Time of Day.	Number of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1887.						
Oct. 26...	12.00	Special..	Freight	A. C. McLean.....	J. Ferguson	8
do 27...	12.00	do ...	do	E. S. Vey.....	M. Fuller.....	
do 31...	21.00	do ...	do	J. Guay.....	J. Belleau	28
do 31...	17.10	38	do	P. E. Heine.....	C. A. Atkinson.....	144
Nov. 1...	8.45	Special..	do	J. Michaud.....	W. E. Turner.....	84
do 5...					D. McQuarry..	113
do 7...	12.10	Special..	Freight	C. B. Humphrey	John Stewart	42
do 8...	5.20		Shunting		C. McHugh.....	13
do 11...	3.30	10	Express	C. J. Rhodes.....	John Ross.....	157
do 24...	23.30	Special..	Freight.....		D. McQuarry.....	148
Dec. 2...						
do 2...	17.15	42	Accommodat n	F. Drummond.....	John Gilker	78
do 4...	3.00	5	Freight	W. J. Campbell.....	J. Gilfillan.....	53
do 5...	5.25	Special..	do	Alex. Grant	James Sproule	170
do 5...	5.25	do ...	do	do	do	170
do 5...	5.25	do ...	do	do	do	170
do 5...	5.25	do ...	do	do	do	170
do 5...	5.25	do ...	do	do	do	170
do 5...	5.25	do ...	do	do	do	170
do 9...	22.00	do ...	do	J. Craigie	R. Wilson	22
do 9...	10.25	63	do	W. Foster	A. Scott.....	30
do 10...	22.00	Special..	do	Alex. Mitchell.....	H. Cummings....	11
do 13...	4.24	9	Express	W. Kelly	R. Carr.....	155
do 13...	13.40	Special..	Freight... ..	W. Crockett.....	J. Stewart	45

RAILWAY.

on the Line of the Intercolonial Railway, &c.—Continued.

Place of Accident.	Name of Person Injured.	Whether Passenger or Employé	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
Londonderry	J. Whalley	Employé.	While coupling.....	Foot sprained....	
Indiantown.....	R. P. Ripley....	do	Slipped while getting on car.	Hip injured.....	
Ste. Valier.....	P. Pardiff	do	Ran against semaphore wire.	Face do	
Chatham Junc... ..	Wm. Carney....	do	While coupling.....	Fingers crushed	
Ste. Flavie	S. Levesque....	do	do	Hand do	
Moncton	S. Watters	do	While trucking freight..	Groin hurt	
Kent Junction... ..	C. B. Humphrey	do	Jumping from one car to another.	Side wrenched..	
Moncton	S. Blackney....	do	While coupling	Hand injured. ...	
Aulac	Ad. Young	Passenger	Fell off train while in motion.	Fatal.....	Accidental.
Campbellton....	Geo. Spears....	Employé ..	Fell off tender of engine	Wrist sprained...	
St. John.....	J. Henderson....	do	Unloading baggage from train.	Finger crushed..	
Gausapsal.....	A. Thomson....	do	While putting fire in engine.	Slightly injured.	
Hampton	W. J. Campbell	do	While holding brake.....	Hand & arm do	
Stellarton	Wm. Eastwood	do	Boiler of engine 170 exploded.	Fatal.....	do
do	Dan. Robertson	do	do do	do	do
do	Alex. Murray..	do	do do	do	do
do	Alex. Fraser....	Neither ..	do do	do	do
do	W. E. McLean..	Employé ..	do do	Slightly injured	
do	Alex. Grant....	do	do do	do	
do	John McEanis..	do	do do	do	
do	A. Chisholm ..	do	While shunting fell into hopper car.	Legs injured.....	
Picton.....	A. Calder.....	do	Fell from top of box car.	Slightly injured.	
New Glasgow... ..	Jas. Pursell....	Neither ..	Found lying on side of track.	Foot cut off.....	
Near Salisbury..	J. B. Gresham..	Passenger	Ventilator in car fell on him.	Leg injured.....	
Kent Junction ...	Thos. Buckley..	Employé ..	While coupling.....	Body crushed...f	

[1888]

INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada

Date.	Time of Day.	Number of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1887.						
Dec. 14...	.....	.....	.....	.....	.....	.....
do 17...	16.00	.....	Shunting .....	.....	O. Brook	86
do 19...	12.15	Special.	Freight	James Daley	W. F. Hicks	119
do 20...	19.30	39	do	A. McPherson	P. Asho	37
do 21...	17.45	Special.	do	W. W. Irving	James Stewart	45
Dec. 23...	7.30	Special.	Freight	A. C. McLean	P. Fullerton	124
do 23...	7.30	do ..	do	G. McElhinney	P. Peterson	123
do 28...	9.00	do ..	do	W. Welling	O. McGilley	118
do 29...	11.10	.....	Shunting .....	.....	R. James	100
do 31...	13.05	Special.	Freight	J. J. Daley	J. G. McDonald	121
do 31...	14.10	do ..	do	A. B. Vance	E. Blair	66
Nov. 1...	8.30	.....	Shunting .....	.....	W. Lovett	93
do 14...	9.00	.....	do .....	.....	P. Fogarty	101
do 17...	6.35	Special.	Freight	W. Welling	N. Sinclair	125
1888.						
Jan. 5...	23.30	do ..	do	J. L. Hebert	F. Probert	149
do 7...	17.30	do ..	do	John Barry	A. L. Doig	3
do 7...	24.30	do ..	do	J. Craigie	P. O' Toole	33
do 9...	22.30	.....	Shunting .....	.....	C. McHugh	18
do 11...	4.00	Special.	Freight	G. Lamkie	Jno. Gratton	44
do 12	21.25	do ..	do	F. Morency	W. Brock	141
do 13...	.....	.....	.....	.....	.....	.....
do 14...	24.30	Special.	Freight	W. Marchesault	L. Dutel	85
do 16...	6.45	do ..	do	Geo. Sears	G. B. Story	60
do 17...	12.30	.....	Shunting .....	.....	W. Mackie	97
do 17...	15.35	34	Express	Geo. Walker	H. Turner	15
do 20...	9.00	.....	Shunting .....	.....	J. W. Boyd	95
Feb. 1...	21.30	Special.	Freight	P. Bouchard	Jas. Scott	146

RAILWAY,

on the Line of the Intercolonial Railway, &c—*Continued.*

Place of Accident.	Name of Person Injured.	Whether Passenger or Employé.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
Pictou Landing.	D. Chisholm ...	Employé..	Lifting piece of iron.....	Back injured....	
Chaudière.....	Jos. Cannie....	do ...	While coupling.....	Finger cut off..	
Near Dorchester	Thos Landry...	do ...	Unloading hand car was struck by train.	Fatal.....	Accidental.
Canaan.....	R. Davidson....	do ...	While turning switch...	Wrist sprained..	
do	Chas. Reid	do ...	Fell off box car.....	Seriously injured	
Near Union	J. W. Hill	do ...	Collision with spec'l train	Seriously injured	
do	J. Fitzpatrick.	do ...	do do	Slightly do	
Amherst.....	Henry McPhee	do ...	While shunting.....	Finger crushed .	
St. John.....	Wm Lattimore	do ...	While coupling	Arm do ...	
Near Alton.....	L.F. Hennessey	do ...	Fell from train.....	Fatal.....	Accidental.
East Mines.....	Thos. Torney	do ...	While coupling.....	Thumb crushed..	
Richmond.....	Alex. Locke....	do ...	do	Hand injured....	
Moncton	Geo. Armstrong	do ...	Fell off car.....	Leg do	
Nappan.....	Wm. Manship.	do ...	While coupling	Hand do	
Sayabec.....	J. L. Hebert....	do ...	While turning turntable.	Chest do	
St. Paschal.....	E. G. Charette	Neither...	Crossing track with team	Slightly crushed	
Shubenacadie....	J. Craigie.....	Employé..	Train broke apart and parts collided.	Nose broken.....	
Moncton.....	J. Osborne	do ...	While shunting.....	Wrist crushed ...	
Bathurst.....	J. Gratton	do ...	Slipped while getting off engine.	Leg broken.....	
St. Roch.....	J. Delisle.....	do ...	While coupling.....	Hand injured....	
Pictou Landing.	Isaac Wall....	do ..	Loading freight.....	Knee do ...	
St. Charles.....	J. Conley.....	do ...	While coupling.....	Finger do ...	
Spring Hill Junction	J. C. Gunn.....	do ...	do	do do ...	
Rivière du Loup	A. Fournier....	do ...	do	Hand crushed....	
Bic.....	P. Beaulieu....	Neither...	Struck by engine while crossing track.	Seriously injured	
Truro	Wm. Yeomans.	Employé..	While coupling.....	Hip injured.....	
Ste. Flavie.....	Jas. Bonville...	do ...	do	Finger injured...	

INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada

Date.	Time of Day.	Number of Train	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1888.						
Feb. 3...	21.30	.....	Shunting .....	.....	J. McHugh	18
do 3...	12.45	45	Express	J. Barry	Jas. Miller	132
do 3..	12.45	45	do	do	do	133
do 3...	8.45	Special.	Freight	H. D. Archibald	P. O'Toole	32
do 4...	20.50	do ...	do	W. McClafferty	do	7
do 2...	23.05	47	Accommodation.	B. Walker	J. Cloutier	85
do 6...	7.05	18	Freight	J. W. Miller	M. Wall	136
do 7...	10.30	.....	.....	.....	W. Smith (N. B. Ry.)..	15
do 7...	14.00	.....	Shunting .....	.....	E. Tobin	93 rd
do 12...	12.30	Special.	Freight	D. Brownell	Jas. Howie	186
do 13...	11.55	30	Express	Jno McFadyen	J. H. Moore	69
do 13...	13.30	Special.	Freight	Chas. H. Bass	G. Sinclair	89
do 14...	6.00	do ...	Plough train	— Graves	P. McKinnon	45
do 16...	14.50	do ...	Snow train	W. Hains	J. Smith	130
do 18...	18.28	4	Accommodation	B. White	J. R. Moore	46
do 18...	10.45	.....	Shunting .....	.....	W. Appleton	83
do 21...	8.00	Special	Freight	S. G. Nickerson	H. Trites	114
do 22...	6.50	.....	Shunting .....	.....	J. Devereaux	6
do 25...	11.05	Special	Freight	W. Foster	A. Scott	42
do 28...	10.30	do ...	do	H. Archibald	H. Cummings	173
do 28...	.....	.....	.....	.....	.....	.....
March 1...	8.00	.....	Shunting .....	.....	Robt. James	100
do 3...	8.45	Special.	Freight	Jas. McDonald	J. Ferguson	66
do 14...	14.00	.....	.....	.....	.....	.....
do 15...	12.30	do ...	Freight	J. Rushton	O. Longley	186
do 21...	14.10	do ...	do	J. J. Daley	J. G. McDonald	128
do 23...	7.15	38	do	J. P. McGuire	Jas. Stratton	22
do 26 ...	20.20	35	Accommodation.	Z. Lockhart	P. Ashe	69

RAILWAY.

on the Line of the Intercolonial Railway, &c.—Continued.

Place of Accident	Name of Person Injured.	Whether Passenger or Employé.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
Moncton.....	A. Harrison.....	do ...	do	Thumb do ...	
Cap St. Ignace.	J. Miller	do ...	Train derailed	Slightly do ...	
do	G. Langlois ...	do ...	do	do do ...	
Spring Hill Junction	Thos. Noiles...	do ...	Hand car struck by train	Fatal.....	Accidental.
Evan's Siding...	W. Densmore..	do ...	While coupling.....	Fingers crushed	
St. Alexandre....	Geo. Begin	do ...	Fell off engine.....	Head injured ...	
Stellarton	Thos. Lester...	do ...	Fell over end of car.....	Foot do ...	
St. John.....	A. Phillips.....	do ...	Knocked off ladder by engine.	Considerably injured.	
Richmond	Wm. Hartleer.	do ...	While coupling	Fatal	do
Hartibogue.....	S. Chapman....	do ...	Slipped while putting fire in engine.	Back injured ...	
Painsec.....	R. Johnston ...	do ...	Died suddenly in car ...	.....	Natural causes
Amherst.....	H. Harris.....	do ...	While coupling.....	Hand crushed....	
East New Mills..	J. Patrick (Ind)	Neither...	Struck by engine	Head injured....	
Campbellton ...	W. Thompson ..	Tem. emp.	Fell off car.....	Fatal.....	Accidental.
Stediac	W A McManus	Employé.	While coupling	Slightly injured.	
Halifax.....	W. Pickering...	do ...	do	Leg do	
Newcastle.....	W. O'Donnell..	do ...	do	Seriously do	
Ste. Flavie.....	Alph. Madore..	do ...	Struck by engine while snowelling snow.	do do	
Albion Crossing	J. McNaughton (b y)	Neither..	While coasting on sled ran into train.	Fatal.....	do
Hopewell.....	Robt. Cullen...	Employé.	While oiling engine.	Arm crushed....	
Truro	Jno. Glenfield.	do ...	Semaphore arm struck his head.	Seriously injured	
St. John	Wm. McLeod...	Employé.	While coupling.....	Eye injured ...	
Humphrey's	J. Fitzpatrick	do ...	do	Finger crushed.	
St. John.....	H. McDevitt...	do ...	While unloading freight	Hand injured .	
Red Pine.....	Albert Lyon....	do ...	Jumped from engine	Back do ...	
Wareka Siding..	A. Langell.....	do ...	Jumped from train.....	Leg sprained....	
Campbellton....	John Hains.....	do ...	Slipped on gondola car..	Leg injured	
Dalhousie Junction	Jas. Card	do ...	Fell off box car.....	Side do	

INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada

Date.	Time of Day.	Number of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.
1888.						
Mar. 28...	5.30	.....	Shunting .....	.....	O. McHugh.....	18
do 30...	10.40	.....	do .....	.....	J. Stewart	74
do 30...	12.00	Special	Freight.....	E. Rioux	J. Smith	37
April 4...	19.00	.....	Shunting .....	.....	J. Phinney.....	33
do 5...	8.30	Special	Freight.....	H. Archibald.....	F. Miller	167
do 10...	1.40	do	do	G. McDougall.....	R. Campbell.....	39
do 16 ..	14.00	do	do	F. W. Johnson	P. O'Toole	125
do 18...	9.00	.....	.....	.....	.....	.....
do 19...	12.00	Special	Freight.....	T. W. Johnson	E. Blair	56
do 21...	16.35	34	Express	E. McKenna	Jas. Deveraux	6
do 26...	21.15	.....	Shunting.....	.....	O. McHugh	18
do 27...	14.20	Special	Freight.....	G. Margeon	F. Hennessy.....	102
do 30...	18.00	.....	Shunting .....	.....	F. Probert	18
May 3...	8.45	Special	Freight.....	A. P. Vance	J. Wall.....	196
do 3...	4.40	do	do	W. M. Thompson..	{ R. H. Coggan	22 }
					{ A. W. White	43 }
do 8...	9.15	.....	Shunting .....	.....	E. Tobin.....	93
do 12...	21.00	.....	do .....	.....	D. Yould.....	95
do 16...	4.25	Special	Freight.....	J. P. Dubé	W. Murphy	2
do 17...	20.48	10	Express	J. Millican.....	H. Tait	155
do 31...	.....	.....	.....	.....	.....	.....
June 8...	23.39	.....	Shunting .....	.....	M. O'Brien	99
do 15...	21.00	34	Express	T. Corbett.....	W. D. Martin.....	128
do 20...	8.05	Special	Freight.....	G. O. Keys.....	H. Cummings.....	173
do 21...	24.50	do	do	R. J. Rutherford	{ P. Peterson.....	8 }
					{ D. Yould	167 }
do 23...	14.00	69	do	J. J. Daley.....	.....	.....
do 25...	16.00	Special	do	H. Archibald.....	P. Wilson	67

RAILWAY.

on the Line of the Intercolonial Railway, &c.—*Continued.*

Place of Accident.	Name of Person Injured.	Whether Passenger or Employé.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
Moncton.....	R McIntyre....	do ...	While coupling.	Fingers crushed.	
Newcastle	Chas. Reid.....	do ...	do	Foot do ...	
Little Metis.....	Oscar Roussell.	do ...	Fell from engine.....	Arm injured	
Truro	Thos. Leister...	do ...	While coupling.....	Finger crushed..	
Stewiacke	W. King	do ...	Fell from engine.....	Slightly injured	
Red Pine.....	R. M Murray	do ...	Slipped on track	Knee do ...	
West River	—Doyle.....	do ...	Rail fell on foot.....	Toes do ...	
Truro	N. Hopper.	do ...	While unloading freight	Finger do ...	
Londonderry	Jas. Irvine	do ...	While coupling.....	do do ...	
East of St. Flavie	E. McKenna ...	do ..	Fell from train.....	Slightly do ...	
Moncton	J. Osborne	do ..	While coupling.....	Leg do ...	
do	D. Henders	do ...	Fell from box car.....	Seriously do ...	
do	E. Harvey	do ...	While coupling.....	Hand crushed....	
Lorne Siding....	G. Kennedy.....	do ...	do	do ..	
Chaham Junct.	T. G. Stratton	do ...	do	do ...	
Richmond	F. Ritchie.....	do ...	do	do ...	
Truro	John Brown....	do ...	do	do ...	
Millstream	M. Archibald...	Neither...	Crossing track was struck by engine.	Fatal.....	Accidental ...
Petitcodiac.....	—Dodson.....	Passeng'r	Walked or fell off train..	Slightly injured	
St. John	Chas. Mitchell.	Employé.	While moving freight ...	Severely do ...	
Moncton.	A. Lockhart ...	do ...	While coupling.....	Thumb crushed.	
Jacquet River....	J. Montgomery	do ..	Trunk fell on foot.....	Toe injured.....	
Pictou Landing	D. Fraser.	do ...	While coupling.....	Hand crushed....	
Elmsdale	J. Fitzpatrick	do ...	do	Thumb do ...	
Truro	P. McLellan...	do ...	While cleaning lamp....	Wrist cut.	
Westville.....	—McIntyre.....	do ...	While coupling	Fingers crushed.	

APPENDIX No. 7a.

EASTERN EXTENSION RAILWAY.

OFFICE OF THE CHIEF SUPERINTENDENT,

MONCTON, N.B., 18th October, 1888.

SIR,—I have the honor to submit the following report on the working of the Eastern Extension Railway for the fiscal year which ended on the 30th June, 1888.

I enclose the report of the Chief Engineer on the permanent way and works, the report of the Mechanical Superintendent on the rolling stock, and the following statements prepared by the Chief Accountant and Treasurer.

No. 1.	Capital account.	
2.	Revenue account	
3.	Locomotive power	(Abstract No. 1)
4.	Car expenses	(do 2)
5.	Maintenance of way and works	(do 3)
6.	Station expenses	(do 4)
7.	General charges	(do 5)
8.	General Balance	

The length of railway operated was the same as last year—80 miles.

The capital account remains the same as last year—\$1,284,495.76.

There is a considerable increase in the gross earnings, as follows:—

1887-88.....	\$70,552 20
1886-87.....	64,107 10
	\$6 445 10

This increase was in both passenger and freight traffic, and about equal proportions in each.

The expenditure compared with last year is as follows:—

1886-87.....	\$94,254 04
1887-88.....	90,954 73
	\$ 3 299 31

The earnings and expenditure for the year compare as follows:—

Expenditure	\$90,954 73
Earnings.....	70,552 20
	\$20,402 53

The whole of the permanent way and works were maintained in good repair, and some improvements were made.

To give greater facilities for traffic 690 feet of sidings were laid and several buildings and platforms were erected, and some were extended.

Fifty-one miles of new fences were built, and 33,913 new ties were put into the track.

The steam ferry boat at the Strait of Canso received considerable repairs.

The rolling stock is in good condition. One locomotive and 56 hopper coal cars were re-built, the cost being charged to working expenses.

These new hopper coal cars were built according to the improved plans of the Intercolonial Railway, and are larger and stronger than the ones they replaced, and have a carrying capacity of one ton each more than they had.

I have the honor to be, Sir,

Your obedient servant,

D. POTTINGER,

Chief Superintendent.

COLLINGWOOD SCHREIBER, Esq.,

Chief Engineer and General Manager

Canadian Government Railways, Ottawa.

No. 1.—EASTERN EXTENSION RAILWAY.
CAPITAL ACCOUNT, Year ending 30th June, 1888.

CR.

DR.

1888.		\$	cts.	1888.		\$	cts.
June 30.....	To cost of road and equipment			June 30.....	By Dominion of Canada.....	1,284,495	76
						1,284,495	76
						1,284,495	76

THOMAS WILLIAMS,
Chief Accountant and Treasurer.

MONCTON, N. B., 30th June, 1888.

No. 2 — EASTERN EXTENSION RAILWAY.
REVENUE ACCOUNT, Year ending 30th June, 1888.

CR.

DB.

Year ending 30th June, 1887.	Expenditure.	Year ending 30th June, 1888.	Earnings.	Year ending 30th June, 1888.
\$ cts		\$ cts.		\$ cts
14,933 56	Locomotive power	17,356 01	Passenger traffic	38,406 42
9,336 87	Car expenses	11,766 68	Freight traffic	23,035 81
51,311 61	Maintenance of way works	43,845 04	Mails and sundries	8,109 97
7,484 87	Station expenses	7,474 28	Balance	70,552 20
11,187 10	General charges	10,552 72		20,403 53
94,254 04		90,951 73		90,954 73

THOMAS WILLIAMS,
Chief Accountant and Treasurer.

MONCTON, N.B., 30th June, 1888.

No. 3.—EASTERN EXTENSION RAILWAY.

LOCOMOTIVE POWER—(Abstract No. 1.)

Year ending 30th June, 1887.		Year ending 30th June, 1888.	
\$	cts.	\$	cts.
3,373	47	3,413	29
5,811	13	7,062	81
655	96	788	11
3,805	89	4,566	68
517	10	701	92
770	01	758	05
14,933	56	17,358	01

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

MONCTON, N.B., 30th June, 1888.

No. 4. - EASTERN EXTENSION RAILWAY.

CAR EXPENSES—(Abstract No. 2.)

Year ending 30th June, 1887.		Year ending 30th June, 1888.	
\$	cts.	\$	cts.
1,794	78	3,004	70
928	52	1,613	31
1,601	92	1,419	28
4,367	80	4,954	97
366	65	308	09
196	12	367	60
81	08	68	73
9,306	67	11,726	68

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

MONCTON, N.B., 30th June, 1888.

No. 5.—EASTERN EXTENSION RAILWAY.
MAINTENANCE OF WAY AND WORKS—(Abstract No. 3).

Year ending 30th June, 1887.	—	Year ending 30th June, 1888.
\$ cts.		\$ cts.
21,475 18	Wages repairing roadway, fences, semaphores.	23,191 03
1,093 00	Rails and fastenings.	893 40
13,518 64	Fies	7,124 30
9,793 71	Timber, lumber, &c., for repairs to bridges, fences, &c.	9,369 65
2,745 23	Repairs to wharves	85 55
1,049 56	do buildings and platforms	1,348 98
702 30	do snow ploughs, flangers and tools.	365 88
1,023 4	Clearing ice and snow	1,426 24
40 58	Miscellaneous.	39 02
51,311 64		43,845 94

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

MONCTON, N.B., 30th June, 1888.

No. 6.—EASTERN EXTENSION RAILWAY.

STATION EXPENSES—(Abstract No. 4).

Year ending 30th June, 1887.	—	Year ending 30th June, 1888.
\$ cts.		\$ cts.
6,266 82	Salaries and wages of Station Masters, Agents, Clerks, Telegraph Operators, Baggage Masters, Yard Masters, Switchmen, Watchmen and Laborers...	5,928 91
1,181 63	Fuel, oil, light, stationery, tickets and other incidental expenses	1,515 37
33 42	Miscellaneous .....	.....
7,484 87		7,474 28

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

MONCTON, N.B., 30th June, 1888.

No. 7.—EASTERN EXTENSION RAILWAY.

GENERAL CHARGES—(Abstract No. 5).

Year ending 30th June 1887.		Year ending 30th June, 1888.
\$ cts.		\$ cts.
1,204 83	Superintendent, Train Despatchers, Clerks, office and travelling expenses...	.....
519 62	Accounting Department, salary of the Accountant and Auditor, Clerks, office and travelling expenses	500 04
6 01	Advertising	116 10
1,386 05	Damages to men, animals and goods	409 24
7,939 05	Ferry	9,491 73
6 52	Telegraph expenses (not including pay to Operators)	3 30
125 02	Miscellaneous	32 31
11,187 10		10,552 72

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

MONCTON, N. B., 30th June, 1888.

No. 8.—EASTERN EXTENSION RAILWAY.

DR. GENERAL BALANCE, Year ending 30th June, 1888. CR.

	\$ cts.		\$ cts.
General stores.....	6,599 73	Dominion of Canada.....	7,893 78
Stations.....	1,569 88	Stations.....	.....
Cash.....	1,065 50	Maine Central Railway.....	1,676 92
Rents.....	29 00	International S ^r . Company.....	1,438 10
Fines and rewards.....	8 30	Boston and Maine Railway....	388 40
Canada Atlantic Railway.....	1 20	Bras d'Or Steamship Co.....	51 25
Cooke & Son.....	29 52		
Grand Trunk Railway.....	36 24		
Western Union Telegraph Co.....	572 09		
Morrison & Co.....	4 50		
Yarmouth S. S. Co.....	2 40		
Boston Halifax and P. E. I. S ^s . Co... Departmental accounts—	1 25		
Militia Department.....\$ 80 64			
P. O. Department..... 1,443 42			
	1,529 04		
	11,448 65		11,448 45

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

MONCTON, N. B., 30th June, 1888.

EASTERN EXTENSION RAILWAY.

CHIEF ENGINEER'S OFFICE,

MONCTON, N. B., 20th September, 1888.

SIR,—I have the honor to submit the following report on the maintenance of the Eastern Extension Railway for the year ending 30th June, 1888.

The mileage remains the same as last year.

SIDINGS.

During the year the sidings at Barney's Brook and Antigonish were lengthened 60 and 240 feet each, respectively.

A new siding was put in at the latter place 390 feet long.

TIES.

During the year 33,913 ties were renewed.

FENCING.

During the year 51½ miles of new barbed wire, lath wire, and woven wire, fencing were erected in place of decayed pole and board fencing.

The cost of the fencing was \$16,779.09, as against \$15,461.97 last year.

Large repairs were made to the snow fences and remaining old pole and barbed wire fence.

WHARVES AND COAL TRESTLES.

Necessary repairs were made to Mulgrave Wharf.

Iron bands were put around the corners of Port Hastings wharf to prevent the cutting of the fenders by ice.

BUILDINGS AND PLATFORMS.

At MERIGOMISH the platform was extended 40 feet. Sixty feet of the old platform was renewed.

FRENCH RIVER platform was extended 36 feet, and 135 lineal feet of the old platform was renewed.

Necessary repairs were also made to this station.

At AVONDALE the platform was extended 72 feet.

At DEWAR'S MILLS a small freight house, 16 by 20 feet, was erected.

At BARNEY'S RIVER, JAMES RIVER and ANTIGONISH the platforms were extended 72 feet each.

At the latter place one-half of the old platform was renewed and the station painted.

An addition of 38 feet was made to the freight house and freight platform.

HEATHERTON platform was extended 72 feet.

BAYFIELD old platform was renewed.

At TRACADIE the platform was extended 72 feet.

The flag station at LITTLE TRACADIE was moved to a new site about one mile west, to a place called Linwood. A new platform was erected.

At HARBOR BOUCHE the platform was extended 72 feet. The station was thoroughly overhauled, repaired and painted.

BRIDGES AND CULVERTS.

At PINE TREE GUT 210 lineal feet of the floor was renewed and 4 new trestle bents put in.

Twenty-five new floor beams were renewed in Sutherland's River Howe truss.

[1888]

A new trestle bent was put under stringer of Little Gut bridge.

Sixteen braces were renewed in Murphy's Mill bridge.

Twenty floor beams were renewed in Yankee Grant bridge.

A new floor 141 feet long was put on Dewar's trestle bridge, also on Grant's pile bridge. Five new trestle bents were also put in under this latter bridge.

New floors were put on Baxter's and McDonald pile bridges; 4 new bents were put in the former.

Large renewals were made to wooden trestle bridge near Mulgrave. A new floor and 6 new bents were put in Pirate Harbor trestle bridge.

Twenty-three floor beams, 19 braces and 12 counter braces were put in James River Howe truss. The top chord damaged by fire was also repaired.

Thirty-nine floor beams, 14 braces and 2 new bents were put in Pomquet pile bridge.

Four bents of West River pile bridge were renewed.

Forty pairs of stringers, cattle guards and open culverts were renewed during the year.

Seventy-one new farm gates were put up in place of those broken and decayed.

The planking was renewed on 47 farms and 12 public crossings.

The track has been well maintained and is in good running order.

I am, Sir,

Your obedient servant,

P. S. ARCHIBALD,

Chief Engineer.

D. POTTINGER, Esq.,
Chief Superintendent,
Moncton.

EASTERN EXTENSION RAILWAY.

MECHANICAL SUPERINTENDENT'S OFFICE,
MONCTON, N. B., 10th October, 1888.

DEAR SIR,—I beg to submit the following statements concerning the rolling stock on the Eastern Extension Railway:—

It consists of:—

- 9 engines.
- 6 first class passenger cars.
- 4 second class do
- 4 postal, baggage and express cars.
- 2 conductor's vans.
- 25 box cars.
- 5 cattle cars.
- 70 platform cars.
- 150 5 ton hopper coal cars.

During the year, one locomotive, and fifty-six hopper coal cars, to carry six tons, instead of five were rebuilt, at the cost of working expenses.

The rolling stock generally, is in good condition.

The water service has been maintained, but no improvements were made, in it.

I am, Sir,

Your obedient servant,

H. A. WHITNEY,

Mechanical Superintendent.

D. POTTINGER, Esq.,
Chief Superintendent,
Moncton.

EASTERN EXTENSION RAILWAY.

RETURN of Accidents and Casualties which have occurred in Canada on the Line of the Eastern Extension Railway, during the Year ended 30th June, 1888.

Date.	Time of Day.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.	Place of Accident.	Name of Person Injured.	Whether Passenger or Employé.	Particulars of Accident.	Extent of Injury.	Verdict of Coroners' Jury.
1888. June 27	7.20	56	Freight....	Finlay Ross ...	A. Dunbar....	56	Amigonish.....	— McIsaac (boy)	Neither ...	While coupling cars.	Fingers crushed.	

MONCTON, N.B., 7th September, 1888.

APPENDIX No. 7b.

WINDSOR BRANCH RAILWAY.

OFFICE OF THE CHIEF SUPERINTENDENT,

MONCTON, N.B., 18th October, 1888.

SIR,—I have the honor to submit the following statements showing the results of the working of the Windsor Branch Railway for the year which ended 30th June, 1888:—

- No. 1. Revenue account.
2. Maintenance of way and works.
3. General balance.
4. Statement of earnings.

I also send you the report of the Chief Engineer on the condition of the permanent way and works.

This line, thirty miles in length, was operated during the year by the Windsor and Annapolis Railway Company on the same terms as last year, the company being allowed to retain two-thirds of the gross earnings, the balance, one-third, being paid over to the Government, the latter maintaining the line.

There is a slight decrease in the gross earnings accruing to the Government when compared with last year, as follows:—

1886-87.....	\$25,327 58
1887-88.....	24,553 55
	\$ 774 03
The gross earnings for the year amounted to.....	\$24,553 55
The expenditure for maintenance of way and works was.....	24,040 33
	\$ 513 23

The necessary repairs and renewals of the track, fences, buildings and other structures were made, and the permanent way and works are in good order.

I have the honor to be, Sir,

Your obedient servant,

D. POTTINGER,

Chief Superintendent.

COLLINGWOOD SCHREIBER, Esq.,

Chief Engineer and General Manager Canadian Government Railways,
Ottawa.

No. 1.—WINDSOR BRANCH RAILWAY.

REVENUE ACCOUNT, Year ending 30th June, 1888.

DR.

CR.

Previous Year.	Expenditure.	Year ending 30th June, 1888.	Previous Year.	Receipts and Earnings.	Amount, Year ending 30th June, 1888.
\$ cts		\$ cts.	\$ cts.		\$ cts.
26,042 33	Maintenance of way and works, Abstract No. 1.	24,010 33	7,966 42	Passenger traffic.....	8,576 04
			16,209 32	Freight traffic.....	14,821 89
			1,151 84	Mails.....	1,155 52
	Balance.....	513 22	25,327 58		
26,042 33		24,553 55	7 4 75		
			26,042 33		24,553 55

[1888]

MONCTON, N.B., 30th June, 1888.

Examined,
 THOMAS WILLIAMS,
Chief Accountant and Treasurer.

R. B. BOGGS,
Acct., W. B. Ry.

No 2.—WINDSOR BRANCH RAILWAY.
Abstract No. 1.—MAINTENANCE of Way and Works.

Previous Year.	Particulars.	Amount.
\$ cts.		\$ cts.
7,758 53	Repairs to track	8,162 71
4,943 96	Rails and fastenings.....	127 86
2,874 50	Ties.....	3,182 00
899 79	Bridges.....	816 82
65 33	Signals.....	36 34
18 80	Culverts and cattle guards.....	2,311 11
2,931 55	Wharf at Windsor.....	32 25
24 15	Buildings and platforms.....	1,044 27
4,545 34	Switch locks.....	23 70
18 28	Fencing.....	4,797 83
173 06	Hand cars and trollies.....	112 67
578 43	Tools and repairs.....	358 57
1,122 61	Snow ploughs and flangers.....	1,856 88
88 00	Accountant's office and expenses.....	1,137 22
26,042 33	Miscellaneous.....	40 00
		24,040 33

R. B. BOGGS,

Acct., W. & B. Ry.

MONCTON, N. B., 30th June, 1888.

Examined,

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

No. 4.—WINDSOR BRANCH RAILWAY.

MONTHLY STATEMENT of Receipts—One-third Earnings.

Month.	Passengers.		Freight.		Mails.		Totals.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.
1887—July.....	899	52	1,050	51	96	90	2,046	93
August.....	1,142	26	1,165	78	96	91	2,404	95
September.....	1,305	98	1,591	90	96	91	2,994	79
October.....	745	47	1,810	14	96	90	2,652	51
November.....	584	87	1,860	08	96	91	2,541	86
December.....	624	58	1,194	80	96	91	1,916	29
1888—January.....	388	73	843	79	95	68	1,328	20
February.....	380	51	894	37	95	68	1,370	56
March.....	517	96	1,175	17	95	68	1,768	81
April.....	543	66	1,171	07	95	68	1,810	41
May.....	585	29	1,202	50	95	68	1,883	47
June.....	857	21	861	88	95	68	1,814	77
	8,576	04	14,821	99	1,155	52	24,553	55

R. B. BOGGS,

Acct., W. B. Ry.

MONCTON, N.B., 30th June, 1888.

Examined,

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

No. 3.—WINDSOR BRANCH RAILWAY.

DR.

GENERAL BALANCE.

CR.

1888.		\$	cts.	1888.		\$	cts.
June 30.	Windsor and Annapolis Railway..	2,256	69	June 30.	Intercolonial Railway.....	318	83
	Stores account.....	6,309	57		Dominion account.....	8,247	43
		8,566	26			8,566	26

R. B. BOGGS,

Acct., W. B. Ry.

MONCTON, N.B., 30th June, 1888.

Examined,

THOMAS WILLIAMS,

Chief Accountant and Treasurer.

[1888]

WINDSOR BRANCH RAILWAY.

CHIEF ENGINEER'S OFFICE,

MONCTON, N.B., 20th September, 1888.

SIR,—I have the honor to submit the following report on the maintenance of the Windsor Branch for the year ending 30th June, 1888.

TRACK.

The mileage remains the same as last year

SIDINGS.

An addition of 100 feet was made to Dawson's siding and a suitable loading ground provided.

TIES.

9,541 ordinary ties and 3 sets of switch ties were renewed last year.

BALLASTING.

4,350 yards of ballast were put in track where needed.

SIGNALS.

Necessary repairs were made to semaphore, switch, and station signals throughout the line.

FENCING.

17 miles of old pole fencing have been replaced with barbed wire and lath wire fencing.

Necessary repairs were made to the remaining fence.

BUILDINGS AND PLATFORMS.

Platforms were renewed at Three Mile Plains and Beaver Bank Stations. An extension of 25 feet was made to the latter.

A small wood shed was built at Mount Uniacke and a drain made through heavy rock cutting.

Some repairs were made to the station house at Windsor and a drain was provided from the cellar with a suitable trap to prevent the tide flowing in at high water.

At Ellershouse the loading platform was extended and made permanent by building a cedar crib in front and filling in solid with earth at the back of it and a layer of coarse stone and gravel on top.

The cattle pens at Beaver Bank and Newport were renewed.

BRIDGES AND CULVERTS.

The masonry of Carroll's, Sackville, Big Bog and Jordan's bridges was overhauled and repaired.

New stringers were put in St. Croix bridge, and masonry was overhauled and repaired.

A Stone culvert 2 miles west of Windsor Junction was rebuilt.

A wooden box culvert at Three Mile Plains crossing was replaced with a masonry culvert.

A wooden box culvert $\frac{1}{4}$ of a mile west of Newport Station was replaced by a masonry culvert.

An old rubble masonry culvert that had caved in near Newport was replaced with a cedar box culvert.

The tracking is in good order and not a wheel has been off the rail during the whole year.

I am, Sir,

Your obedient servant,

P. S. ARCHIBALD,

Chief Engineer.

D. POTTINGER, Esq.,

Chief Superintendent,

Moncton.

APPENDIX No. 7c.

PRINCE EDWARD ISLAND RAILWAY.

SUPERINTENDENT'S OFFICE,

CHARLOTTETOWN, P.E.I., 1st Sept., 1888.

SIR,—I have the honor to submit the following report on the working of the Prince Edward Island Railway for the fiscal year ended 30th June, 1888.

I enclose the following statements prepared by the Accountant and Auditor:—

- No. 1. Capital account.
 2. Revenue account.
 3. Locomotive power (Abstract No. 1.)
 4. Car expenses (do 2.)
 5. Maintenance of way and works (do 3.)
 6. Station expenses (do 4.)
 7. General charges (do 5.)
 8. Statement of general stores account.
 9. General balance.
 10. Comparative statement of averages.

CAPITAL ACCOUNT.

The total expenditure on capital account to 30th June, 1887, was.....	\$3,741,780 89
No additions being made during the year, the total expenditure to 30th June, 1888, was the same as the previous year.....	<u>3,741,780 89</u>

REVENUE ACCOUNT.

The gross earnings for the year amounted to.....	\$158,363 62
Previous year.....	155,303 37
Increase.....	<u>\$ 3,060 25</u>

Included in the earnings for the year 1886-87 is the sum of \$9,000 received for special mail service. As you are aware this service was not performed during the past year, otherwise our increase would have been about \$12,000.

The earnings per mile of railway compare with the previous year as follows:—

1886-87.....	\$739 53
1887-88.....	754 11

An increase per mile of.....\$ 14 58

The length of road operated in each year was the same, namely, 210 miles.

[1888]

STATEMENT.

	Passengers Carried.	Earnings.
1886-87	130,067	\$66,334 95
1887-88.....	131,246	66,943 28
Increase.....	<u>1,179</u>	<u>\$ 603 33</u>

	Tons of freight carried.	Earnings.
1886-87.....	53,587	\$71,152 52
1887-88.....	59,603	80,399 79
Increase.....	<u>6,016</u>	<u>\$ 9,247 27</u>

	Earnings.
Mails and sundries, 1886-87.....	\$17,815 90
do 1887-88.....	11,020 55
Decrease	<u>\$6,795 35</u>

The engine mileage compared with last year was :—

1886-87.....	316,763
1887-88.....	306,924
Decrease	<u>9,839</u>

The train mileage compared with last year was :—

1886-87.....	258,457
1887-88.....	248,410
Decrease	<u>10,047</u>

The car mileage compared with last year was :—

1886-87	1,249,892
1887-88	1,309,922
Increase	<u>60,030</u>

EXPENDITURE.

The working expenses, as compared with last year, were as follows :—

1886-87.....	\$204,237 45
1887-88.....	229,639 95
Increase.....	<u>\$ 25,402 50</u>

Included in the above expended on new works are the following items :—

Iron bridge at Curtis Creek.....	\$ 3,141 66
New locomotive	7,700 00
Moving freight shed at Cape Traverse	232 00
Stone box culvert at Swinehammers' Cut.....	405 29
do do near Tignish.....	272 79
do do near Alberton.....	586 60

Total new works.....\$12,388 34

Increase over last year in :—

Sleepers	\$10,106 97	
Fencing.....	4,590 03	
		<u>14,697 00</u>
Total		<u>\$27,085 34</u>

TRACK.

Eight hundred and fifty iron rails have been renewed. Nine thousand four hundred and forty steel fish plates have been put in track, to replace broken iron ones. Twelve steel rail frogs were put in.

SIDINGS.

At Hunter River, Full's siding was moved to his mill, and 80 feet added to its length. At Charlottetown the siding room was increased by the addition of 1,545 feet. Rolls Bay siding was extended 50 feet.

SLEEPERS.

During the year 74,781 sleepers have been put in the track. Thirty-eight sets of switch sleepers, and 25 switch frames, and 20 head blocks, with switch frames, have been renewed.

BALLASTING.

Seven thousand three hundred and twenty-two cubic yards of ballasting were distributed where most needed. The greater part of this was hauled a distance of 69 miles. Nine hundred and eighty-cur cubic yards of earth were used to widen embankments.

BRIDGES, CATTLE GUARDS, &C.

At Alberton, the wharf track bridge received new wall plates, and other necessary repairs.

At Intervale, a stone box culvert 4 feet by 6 feet and 13 feet from the base of rail to surface of paving, was put in to replace the old bridge.

Northam Bridge received new wall plates.

Richmond, Eilerslie, and Wellington Bridges had new centre bents. Richmond bridge received new top sleepers.

New braces were put under Breadalbane Road and Elliott's Bridges.

Miller's Bridge received new wall plates and general repairs.

The old wooden bridge at Curtis Creek has been replaced by three 26 feet iron girders and stone abutments.

Pine Brook Bridge received a new top and stringers

At Charlottetown, two bridges on the breast-work have been re-built.

Mount Stewart Bridge received new floor beams and stringers.

Morell and Mudgell Bridges had general repairs.

At Souris the overhead bridge received a new covering and stringers.

Two culverts near Charlottetown have had tops and stringers renewed.

A masonry culvert was rebuilt at the Pottery, 1½ miles from Charlottetown.

A masonry box culvert 2 feet by 4 feet was built at Swinehammer's embankment.

Four timber culverts were put between Mount Stewart and Georgetown to carry off the surface water.

Two pipe culverts and 18 French drains were replaced by culverts.

New cattle guards have been put in at a road east of Mill River, at Toban Road two miles east of Conway, and at a new road east of Coleman Station.

Twenty-one cattle guards have been renewed.

BUILDINGS AND PLATFORMS.

Alberton Station and wharf freight shed have been reshingled.

Mill River and Harper's flag station have been rebuilt.

A flag station was erected at Pawe's siding and a platform 140 feet long was put down.

St. Nicholas flag station was rebuilt and a platform 140 long was put down.

At Summerside the station building was repaired and painted. The coal shed on the wharf was raised and received extensive repairs.

At Cape Traverse the freight shed was removed on to the wharf, as the piles upon which it stood were badly eaten by the teredo worm.

At Charlottetown a brick furnace for tempering springs was built in the blacksmith shop. Five hundred and fifty feet of flooring were laid in the round house, 500 feet were laid in the carpenter shop, and 3,350 feet of flooring and 500 feet of timber were laid in the machine shop. The engine pit was rebuilt.

At Mount Stewart 5,000 feet of 3 inch plank were used in partly renewing the station platform.

At Morell 500 feet of boards were used for covering the station platform.

At Souris 500 feet of deal were used in repairing the floor of the round house. The coal shed received a new front and was otherwise repaired.

At Georgetown the roof of the baggage room was renewed.

WHARVES.

Alberton wharf received new side fenders, two new mooring posts, and other necessary repairs.

At Charlottetown two cars of brush, 50 tons of hard stone, and 15 pieces of timber were used in repairing the wharf. Eighteen thousand feet of plank were used to repair the roadway on the wharf. One hundred feet of the breastwork at the east end of the approach to the station was renewed.

At Georgetown the wharf received 100 tons of stone, 3 cars of brush, and 8 pieces of timber. Four thousand feet of 3 inch plank were used to repair the roadway on the wharf.

The breastwork at St. Peter's Bay received 50 tons of stone, 200 yards of earth and 3 cars of brush.

At Souris ten thousand feet of 3 inch plank were used to repair the covering on the wharf. Five hundred yards of clay were used in repairing the approach to the wharf.

FENCING.

Twenty-four miles of fence (originally spruce poles) were replaced with barb wire. Nineteen and one-quarter miles of old board fence were replaced with barb wire, woven wire and Everett fencing. One thousand feet of Everett fence was erected at Hunter River. Five hundred feet of snow fence was built. Five thousand five hundred and seventy-three feet of snow fence was rebuilt.

One hundred and twenty-five farm gates, and 120 gate posts were renewed.

On 20 farmers road crossings new planks were laid down.

SEMAPHORE SIGNALS, &C.

All semaphores, switch frames, targets, telegraph signals and outside lamps have received attention when necessary and are in good condition.

WATER SERVICE.

Tracadie, Morell, Mount Stewart and Ashton tanks received new coverings and boxes.

STORES.

The purchase of stores during the year amounted to \$80,407.98.

The value of stores on hand to 30th June, 1888, was:—

General stores.....	\$ 80,066 53
Coal.....	4,474 42
Rails and fastenings.....	22,270 34
Old material serviceable.....	7,932 00
Total.....	<u>\$114,743 29</u>

These stores have for the most part been purchased by tender and contracts, which follows out the practice of previous years.

I enclose a return of accidents and casualties which have occurred on the railway during the year.

I am pleased to say that the roadbed, buildings and rolling stock are in good condition.

I have the honor to be, Sir,

Your obedient servant,

J. UNSWORTH,

Superintendent.

COLLINGWOOD SCHREIBER, Esq.,

Chief Engineer and General Manager Government Railways,

Ottawa.

No. 1.—PRINCE EDWARD ISLAND RAILWAY.

DR.		CAPITAL ACCOUNT.		CR.	
1887.		\$ cts.	1887.		\$ cts.
June 30	To cost of Road and Equip- ment to date.	3,741,780 89	June 30	By Dominion of Canada ...	3,741,780 89
1888.			1888.		
June 30	To Expenditure, Year end- ed 30th June, 1888.		June 30	do do ...	
		3,741,780 89			3,741,780 89

W. T. HUGGAN,

Accountant and Auditor.

CHARLOTTETOWN, P.E.I., 30th June, 1888.

No. 2.—PRINCE EDWARD ISLAND RAILWAY.

REVENUE ACCOUNT for Year ended 30th June, 1888.

Previous Year.	Expenditure.	Year ended 30th June, 1888.	Previous Year.	Receipts.	Year ended 30th June, 1888.
\$ cts.		\$ cts.	\$ cts.		\$ cts.
56,534 30	Locomotive power, per Abstract No. 1.	66,390 76	66,334 95	Passenger traffic.	66,943 28
33,924 96	Car expenses, per Abstract No. 2.	32,158 91	71,152 52	Freight traffic.	80,393 79
76,309 25	Maintenance of way and works, per Abstract No. 3.	92,339 10	17,815 90	Mails and sundries.	11,030 55
25,321 38	Station expenses, per Abstract No. 4.	26,712 41	155,303 37	Total Receipts.	158,363 62
12,147 56	General charges, per Abstract No. 5.	12,038 77	48,934 08	Balance.	71,276 33
204,237 45	.....Totals.....	229,639 95	204,237 45	..... Totals.	229,639 95

W. T. HUGGAN,

Accountant and Auditor.

CHARLOTTETOWN, P.E.I., 30th June, 1888.

No. 3.—PRINCE EDWARD ISLAND RAILWAY.
LOCOMOTIVE POWER—(Abstract No. 1).

Previous Year.	Details.	Year ended 30th June, 1888.
\$ cts.		\$ cts.
1,240 41	Mechanical Superintendent's salary, clerks, office and travelling expenses ...	1,272 37
15,335 85	Wages of drivers, firemen and cleaners.. .. .	15,690 49
11,625 67	Fuel.....	13,539 59
2,276 46	Oil, tallow, waste and small stores.....	2,291 98
24,286 24	Repairs to engines, tenders and engine tools	30,695 43
547 85	Water, including pump and tank repairs	783 07
1,221 82	Miscellaneous.....	2,127 83
56,534 80	Totals.....	66,290 76

W. T. HUGGAN,
Accountant and Auditor.

CHARLOTTETOWN, P.E.I., 30th June, 1888.

No. 4.—PRINCE EDWARD ISLAND RAILWAY.
CAR EXPENSES—(Abstract No. 2).

Previous Year	Details.	Year ended 30th June, 1888.
\$ cts.		\$ cts.
9,262 09	Repairs to passenger cars	7,776 34
1,219 24	do postal and baggage cars	994 16
7,036 53	do freight cars and vans.. .. .	6,712 69
12,777 75	Wages of conductors, train baggage masters and brakemen.....	12,707 53
540 19	Oil and waste for packing.....	515 46
2,353 95	Small stores and fuel.....	2,818 53
735 21	Miscellaneous.....	634 20
33,924 96	Totals.....	32,158 91

W. T. HUGGAN,
Accountant and Auditor.

CHARLOTTETOWN, P.E.I., 30th June, 1888.

[1888]

No. 5.—PRINCE EDWARD ISLAND RAILWAY.
MAINTENANCE of Way and Works—(Abstract No. 3).

Previous Year.	Details.	Year ended 30th June, 1888.
\$ cts.		\$ cts.
419 96	Engineer's salary, clerks, office and travelling expenses.....	411 96
41,479 07	Wages in repairing roadway, fences and semaphores.....	45,235 69
3,448 65	Rails, chairs and spikes	4,957 31
6,713 18	Sleepers	16,880 14
8,572 59	Timber and lumber for repairs to bridges, cattle guards, fences, &c.....	13,685 83
1,897 96	Repairs to wharves.....	1,284 53
6,525 39	do buildings and platforms	5,075 18
2,689 00	do snow ploughs, flangers and tools.....	2,757 82
4,503 45	Clearing ice and snow	2,950 63
76,809 25	.....Totals.....	92,339 10

W. T. HUGGAN,

Accountant and Auditor.

CHARLOTTETOWN, P.E.I., 30th June, 1888.

No. 6.—PRINCE EDWARD ISLAND RAILWAY.
STATION EXPENSES—(Abstract No. 4).

Previous Year.	Details.	Year ended 30th June, 1888.
\$ cts.		\$ cts.
19,099 88	Salaries and wages of station masters, agents, clerks, telegraph operators, station baggage men, yardmasters, switchmen, watchmen and laborers.....	19,546 06
6,221 50	Fuel, oil, light, stationery, tickets and other incidental expenses.....	7,165 75
.....	Miscellaneous .....	.....
25,321 38	.....Totals.....	26,712 41

W. T. HUGGAN,

Accountant and Auditor.

CHARLOTTETOWN, P.E.I., 30th June, 1888.

No. 7.—PRINCE EDWARD ISLAND RAILWAY.

GENERAL CHARGES (Abstract No. 5).

Previous Year.	Details.	Year ended 30th June, 1888.
\$ cts.		\$ cts.
5,273 94	Superintendent's and train despatcher's salaries, clerks, office and travelling expenses.....	4,783 09
5,228 69	Accountant and auditor's, paymaster's and cashier's salaries, clerks, office and travelling expenses.....	5,237 33
514 17	Advertising.....	477 04
362 54	Damages to men, animals and goods.....	211 80
540 09	Telegraph expenses (not including pay to operators).....	642 10
228 13	Miscellaneous.....	687 41
12,147 56	Totals.....	12,038 77

W. T. HUGGAN,

Accountant and Auditor.

CHARLOTTETOWN, P. E. I., 30th June, 1888.

No. 8.—PRINCE EDWARD ISLAND RAILWAY.

STATEMENT of General Stores Account, Year ended 30th June, 1888.

1887.	DR.	\$ cts.	\$ cts.
June 30...	To balance brought forward.....		114,155 01
1888.			
June 30...	To purchase during the year.....	80,407 98	
	Charges from other Departments.....	10,800 47	
	Pay-rolls.....	2,615 40	
			93,823 85
1888.	CR.		207,978 86
June 30...	By issues during the year.....		93,235 57
	Balance. { Ordinary stores..... \$80,066 53 } { Fuel..... 4,474 42 } { Rails and fastenings on hand. 22,270 34 } { Old material, serviceable..... 7,932 00 }		114,742 29

W. T. HUGGAN,

Accountant and Auditor.

CHARLOTTETOWN, P. E. I., 30th June, 1888.

No. 9.—PRINCE EDWARD ISLAND RAILWAY.

DR.	GENERAL BALANCE.		CR		
	\$	cts.	\$	cts.	
General stores.....	114,743	29	Dominion account.....	117,922	23
Cash.....	2,284	40	Accident insurance.....	4,624	31
Stations.....	743	85			
Militia Department.....	91	02			
Anglo-American Telegraph Co.....	46	43			
Judge Weatherbee.....	30	00			
Sidney Grey.....	25	00			
Post Office Department.....	4,582	55			
Total.....	122,546	54	Total.....	122,546	54

W. T. HUGGAN,

Accountant and Auditor.

CHARLOTTETOWN, P.E.I, 30th June, 1888.

No. 10.—PRINCE EDWARD ISLAND RAILWAY.

COMPARATIVE STATEMENT of Averages for Year ended 30th June, 1888.

Details.	1888.	1887.
Mileage of railway open.....	210	210
Engine mileage.....	306,924	316,763
Train do.....	248,410	258,457
Car do.....	1,309,922	1,249,892
Receipts per engine mile..... Cents	51·59	49·02
do do mile of railway..... Dollars	754·11	739·53
Percentage of passenger earnings to gross receipts.....	42·27	42·71
do freight do do.....	50·77	45·82
do other do do.....	6·96	11·47
Expenses per engine mile—		
Drivers, firemen and cleaners' wages.....	5·11	4·84
Fuel.....	4·42	3·67
Oil, tallow, waste and small stores.....	0·75	0·72
Repairs to engines.....	10·00	7·67
Water and tank repairs.....	0·25	0·17
Miscellaneous.....	0·69	0·38
Mechanical Superintendent's salary, office and travelling expenses.....	21·22	17·45
	0·41	0·39
Total..... Cents	21·63	17·84
Locomotive power per engine mile.....	21·63	17·84
Car expenses do.....	10·48	10·71
Maintenance of way and works do.....	30·09	24·09
Station expenses do.....	8·70	7·99
General charges do.....	3·92	3·84
Total per engine mile..... Cents	74·82	64·47
Locomotive power per train mile.....	26·73	21·87
Car expenses do.....	12·94	13·13
Maintenance of way and works do.....	37·17	29·52
Station expenses do.....	10·75	9·80
General charges do.....	4·85	4·70
Total per train mile..... Cents	92·44	79·02
Railway expenses per mile of railway..... Dollars	1,093·52	972·56

W. T. HUGGAN,

Accountant and Auditor.

CHARLOTTETOWN, P. E. I., 30th June, 1888.

PRINCE EDWARD ISLAND RAILWAY.

MECHANICAL SUPERINTENDENT'S OFFICE,

CHARLOTTETOWN, 20th August, 1888.

SIR,—I beg to submit for your information the following statements, showing the operation of the Mechanical Department of this railway for the fiscal year ending 30th June, 1888:

A.—Monthly statement of the cost of locomotive power.

B.—Statement of the performance and consumption of locomotives.

C.—Monthly statement of car mileage.

D.—Statement showing the number of locomotives, cars, snow ploughs and flangers.

E.—Comparative statement of the expenses of the Mechanical Department for the years 1886-87, and 1887-88.

In July last a heavy freight engine was purchased to replace engine No. 10, condemned. The cost of this engine has been included in working expenses. Engines 4, 6, 12, 14 and 18 have received new fire boxes and tubes.

Ten 10-ton platform cars have been rebuilt during the year to replace an equal number worn out in the service.

By reference to Statement D it will be seen that the stock of locomotives, cars, snow ploughs and flangers provided on capital account consists of:—

21 locomotives.

17 first class passenger cars.

15 second class passenger and baggage cars.

3 postal and smoking cars.

175 box cars.

125 platform cars.

3 conductor's vans.

1 pay car.

8 snow ploughs

7 flangers.

I am pleased to be able to report that the efficiency of the rolling stock has been well maintained during the year, and is in good condition.

I have the honor to be, Sir,

Your obedient servant,

J. UNSWORTH,

Superintendent and Mechanical Superintendent.

COLLINGWOOD SCHREIBER, Esq.,

Chief Engineer and General Manager Government Railways,

Ottawa.

PRINCE EDWARD

MECHANICAL

A.—STATEMENT of the cost of Locomotive

Months.	Miles run by Engines, less Ballasting.	Cost of				
		Enginemen's Wages.	Fuel.	Oil, Tallow, Waste, &c.	Repairs.	Water, including tank and pump repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1887—July.....	30,996	1,450 10	1,079 86	209 88	2,537 82	95 88
August.....	31,165	1,420 07	1,166 76	205 94	1,294 12	4 76
September.....	30,673	1,326 70	996 12	183 76	2,333 07	70 77
October.....	30,551	1,319 25	1,284 62	336 85	2,422 49	80 07
November.....	36,932	1,373 52	1,380 49	213 09	2,263 15	143 45
December.....	21,633	1,180 33	1,037 20	189 07	3,183 15	205 44
1888—January.....	19,386	1,233 13	1,062 50	169 78	3,029 55	56 46
February.....	20,521	1,863 31	1,012 50	152 25	3,127 61	72 09
March.....	20,214	1,333 05	1,017 00	153 52	2,717 41	31 75
April.....	17,934	1,103 87	872 58	125 51	2,846 64	7 01
May.....	22,238	1,205 19	1,290 96	185 71	2,707 68	13 44
June.....	30,711	1,381 97	1,339 00	166 62	2,222 74	1 95
Totals.....	306,924	15,690 49	13,539 59	2,291 98	30,685 43	783 07

ISLAND RAILWAY.

DEPARTMENT.

Power, for the Year ended 30th June, 1888.

Miscellaneous, including expenses of Office and Engine Houses.		Average per mile run.						
		Total.	Enginemn.	Fuel.	Oil, Tallow, &c.	Repairs.	Water.	Miscellaneous.	Total.
\$ cts.	\$ cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
299 84	5,663 38	4·68	3·49	0·68	8·19	0·31	0·94	18·29
277 28	4,368 93	4·56	3·74	0·66	4·15	0·01	0 89	14·01
277 84	5,188 26	4·32	3·24	0·60	7·61	0·23	0·91	16·91
296 59	5,739 87	4·32	4·20	1·10	7·93	0·26	0·97	18·78
342 34	5,716 04	4·44	4·46	0·69	7·31	0·46	1·11	18·47
315 73	6,110 92	5·45	4·78	0·88	14·71	0·95	1·46	28·24
341 65	5,893 07	6·36	5·48	0·87	15·62	0·30	1·76	30·39
343 93	6,071 69	6 64	4·93	0·74	15·24	0·35	1·68	29·58
269 52	5,522 25	6·59	5·03	0·76	13·44	0·16	1·33	27·31
280 20	5,235 81	6·15	4·86	0 70	15·88	0·04	1·56	29·19
206 19	5,609 17	5·42	5·81	0·84	12·17	0·06	0·92	25·22
159 09	5,271 37	4·50	4·36	0·54	7·23	0·01	0·52	17·16
3,400 20	66,390 76	5·11	4·41	0·75	9·99	0·26	1·11	21·62

J. UNSWORTH,

Superintendent and Mechanical Superintendent.

PRINCE EDWARD

MECHANICAL

B.—STATEMENT of the Performance and Consumption

Months.	Hours in Steam.	Train Mileage.				Miles run by Engines.			
		Passenger.	Freight and Mixed.	Ballasting.	Piloting.	With Train.	Light.	Shunting.	Total.
1887—July	3,930	11,819	13,705	1,679	.....	27,203	337	5,285	32,825
August	4,453	11,630	14,284	6,236	35	32,185	70	5,946	38,201
September.....	4,088	10,917	14,446	2,392	160	27,903	70	5,100	33,475
October	3,943	10,958	14,217	1,117	49	26,241	10	5,487	31,828
November.....	4,013	10,808	14,506	1,072	133	26,519	14	5,671	32,204
December	3,141	2,046	14,445	59	489	17,039	22	4,642	21,703
1888—January	3,166	44	13,102	12	2,264	15,422	91	3,890	19,403
February	3,584	536	13,057	.....	2,952	16,545	204	3,772	20,521
March.....	3,543	192	14,310	.....	1,174	15,676	291	4,247	20,214
April.....	2,570	520	13,196	.....	154	13,870	62	4,002	17,934
May.....	3,343	2,228	14,080	1,460	800	18,568	111	5,219	23,898
June.....	4,031	11,250	13,914	2,197	.....	27,361	215	5,757	33,333
Totals	43,806	72,748	167,262	16,224	8,200	264,634	1,497	59,416	325,549

ISLAND RAILWAY.

DEPARTMENT.

of Locomotives, for the Year ended 30th June, 1888.

Total Mileage.		* Average of Cars per mile run with Train	Average Mileage.		Consumption.				Consumption per 100 Miles run by Engines.			
Cars.	Snow Ploughs.		Miles to one hour in Steam.	Of cars to one of Engine.	Bushels of Coal	Pints of Oil.	Pounds of Tal- low.	Pounds of Waste.	Bushels of Coal	Pints of Oil.	Pounds of Tal- low.	Pounds of Waste.
138,402	.....	5.08	8.35	4.2	11,981	1,120	818	419	36.49	3.41	2.49	1.52
177,250	.....	5.51	8.58	4.64	15,509	1,237	832	560	39.81	3.2	2.17	1.46
139,225	.....	5.01	8.19	4.16	12,484	1,066	644	484	37.29	3.18	1.92	1.44
143,616	.....	5.46	8.07	4.49	14,189	1,233	838	579	44.57	3.87	2.66	1.63
146,253	44	5.5	8.02	4.54	15,561	1,203	767	527	48.3	3.73	2.38	1.63
99,839	.....	6.03	6.93	4.6	11,037	1,071	665	470	50.58	4.9	3.06	2.16
67,858	5,070	5.16	6.12	3.49	10,625	979	632	381	54.77	5.0	3.31	1.96
66,590	9,745	4.90	5.72	3.24	10,195	923	680	368	49.68	4.49	3.31	1.79
86,278	1,782	5.95	5.70	4.26	10,212	757	641	368	50.5	3.74	3.17	1.96
72,992	.....	5.32	6.98	4.0	7,574	660	571	362	42.23	3.6	3.18	2.01
133,770	.....	7.5	7.15	5.59	12,704	1,002	941	472	53.16	4.19	3.93	1.97
150,881	.....	5.5	8.26	4.53	13,865	1,284	937	508	41.59	3.85	2.8	1.52
1,422,959	16,641	5.55	7.43	4.37	145,639	12,535	8,987	5,548	44.79	3.85	2.76	1.39

*Deduct piloting in making these averages.

J. UNSWORTH,
Superintendent and Mechanical Superintendent.

PRINCE EDWARD ISLAND RAILWAY.

MECHANICAL DEPARTMENT.

C.—MONTHLY STATEMENT of Car Mileage, Year ended 30th June, 1888.

Months.	First-Class.	Second-Class and Baggage.	Postal and Smoking.	Box and Stock.	Platform.	Total.
1887—July.....	29,581	28,375	12,713	42,528	25,205	138,402
August.....	29,681	29,321	14,534	44,184	59,530	177,250
September.....	25,823	27,802	12,248	47,486	25,866	139,225
October.....	27,671	30,551	9,271	61,812	14,311	143,616
November.....	25,134	29,057	9,952	64,887	17,223	146,253
December.....	16,474	18,544	10,431	44,357	10,043	99,849
1888—January.....	13,410	14,513	7,725	21,959	10,246	67,853
February.....	13,424	15,132	7,099	18,434	12,501	66,590
March.....	14,840	16,777	7,142	21,155	26,364	86,278
April.....	14,329	16,099	6,756	25,590	10,218	72,992
May.....	16,779	16,669	12,758	65,642	31,922	133,770
June.....	25,873	27,046	13,150	50,286	34,526	150,881
Totals.....	253,019	269,886	123,779	498,310	277,955	1,422,959
LESS—Ballasting.....		2,970	9,611	1,128	99,328	113,037
Balance.....	253,019	266,916	114,168	497,192	178,627	1,309,922

J. UNSWORTH,

Superintendent and Mechanical Superintendent.

PRINCE EDWARD ISLAND RAILWAY.

MECHANICAL DEPARTMENT.

D.—STATEMENT showing the Number of Locomotives and the various classes of Cars and Snow Ploughs on hand 30th June, 1887 and 1888.

Particulars.	Classification of Cars.										Snow Ploughs.		
	Locomotives.	1st Class.	2nd Class and Baggage.	Postal and Smoking.	Box and Stock.	Platform.	Vans.	Pay Car.	Total.	Snow Ploughs.	Flangers.	Total.	
On hand 30th June, 1887, serviceable.....	21	17	15	3	175	120	3	1	324	8	7	15	
do do condemned.....						5			5				
Total stock 30th June, 1887.....	21	17	15	3	175	125	3	1	339	8	7	15	
Condemned on hand 1st July, 1887.....						5			5				
do during the year.....	1					10			10				
Less:—	1					15			15				
Purchased and charged to working expenses..	1												
Re-built.....						10			10				
ADD:—						5			5				
Serviceable and repairing.....	21	17	15	3	175	120	3	1	334	8	7	15	
Total on record 30th June, 1888.....	21	17	15	3	175	125	3	1	339	8	7	15	

J. UNSWORTH,
Superintendent and Mechanical Superintendent.

PRINCE EDWARD ISLAND RAILWAY.

MECHANICAL DEPARTMENT.

E.—COMPARATIVE STATEMENT of the Expenses of the Mechanical Department, for the Year ended 30th June, 1888.

	1888.	1887.
The miles run by trains were.....	248,410	258,457
do engines were.....	306,924	316,783
do cars were.....	1,309,922	1,249,892
do snow ploughs were.....	16,641	27,285
	\$ cts.	\$ cts.
The cost of locomotive power was.....	66,390 76	56,534 30
do repairs to cars was.....	15,483 19	17,517 85
do labor, oil, and waste for packing, was.....	515 46	540 19
do repairs to passenger cars was.....	7,776 34	9,262 08
do do postal and smoking cars was.....	994 16	1,219 24
do do freight cars and vans was.....	6,712 69	7,036 53
The cost of locomotive power per 100 miles run by trains was.....	26 74	21 87
do do do engines was.....	21 63	17 84
do do do CARS WAS.....	5 06	4 52
The cost of repairs to cars per 100 miles run by trains was.....	6 23	6 77
do do do engines was.....	5 03	5 53
do do do CARS WAS.....	1 18	1 40
The cost of labor, oil and waste, for packing, per 100 miles run by trains was.....	0 20	0 20
do do do engines was.....	0 17	0 17
do do do CARS WAS.....	0 04	0 04
Repairs to passenger cars per 100 miles run by trains were.....	3 13	3 58
do postal and smoking cars were.....	0 40	0 47
do freight cars and vans were.....	2 72	2 72

J. UNSWORTH,
Superintendent and Mechanical Superintendent.

PRINCE EDWARD ISLAND RAILWAY.

RETURN of Accidents and Casualties which have occurred on the Prince Edward Island Railway, during the Year ending 30th June, 1888.

Date.	Time of Day or Night.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.	Place of Accident.	Name of Persons Injured.	Whether Passenger or Employé.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
1887.												
July 6...	5:40p.m.	...	Special....	J. R. Scott....	N. Watson.....	16	Emerald	Henry Conner....	Employé.	Caught between passenger car and Van while coupling.	Body bruised.	
Oct. 11.	9:30a.m.	...	.....	.....	H. Craswell...	2	Summerside	John H. Burns...	Employé.	While shunting in yard got arm caught between the bumpers of two flat cars.	Arm severely bruised.	
1888.												
March 6.	2:40p.m	1	Accommodation...	F. Kelly.....	{ John Yeo... { D. Pound... }	3 5	Portage	P. Lafferty.....	Employé.	Fell off flat car.	Head and face injured.	

[1888]

APPENDIX No. 8.

DEPARTMENT OF RAILWAYS AND CANALS,**SUPERINTENDING ENGINEER'S OFFICE,****MONTREAL, 29th October, 1888.**

SIR,—I have the honor to submit my report on the various works under my charge, for the fiscal year 1887-88, ended on the 30th June last.

These works are the Lachine and Beauharnois Canals, on the River St. Lawrence, and the Chambly Canal and St. Ours Lock, on the Richelieu River.

These canals have been maintained in an efficient state, without accident or interruption to the traffic.

Statements are annexed showing the amount collected for fines, damages, &c., together with monthly returns of the highest and lowest water registered at the lower and upper entrances of each canal, and on each of the mitre sills of St. Ours Lock.

LACHINE CANAL.

This canal was closed on the 30th November, 1887.

The water was drawn off on 18th April, 1888, and let in again on the evening of the 30th of same month. Navigation was fully opened on the morning of 1st May.

While the water was out of the canal all the works under water received the necessary repairs, and no detention of any kind was caused to the trade during the year.

During season of navigation the water was kept at a good height in all the levels, both for navigation and manufacturing purposes.

During the winter months and until the latter part of March, the water was so low in Lake St. Louis that it was found impossible to allow all the mills and factories, using the water, to work at the same time, as, by doing so, the water on the summit level would have been drawn down, and the slope walls on both sides of the canal or that reach would have been seriously injured by the lowering and raising of the ice, and to prevent such an eventuality, one-half of the mills and factories were obliged to work at night and the other half by day.

From 1st July, 1887, until the close of season of navigation, 30th November of same year, the trade through this canal was much brisker than it was during the months of May and June, specially the grain trade.

While the water was out in April and for the first time since the canal was last enlarged, the water became so low in the river at the lower entrance that the bottom of the Wellington Basin, and of the nineteen feet channel, leading from it to Lock No. 2 was dry in many places. These dry parts stood above the nineteen feet bottom from twelve to fifteen inches, and some large boulders which had been displaced by the dredge, while at work in 1885, were exposed to view.

Advantage was taken of the low state of the water to lower these projecting points and to remove these boulders.

Previous to the removal of these obstructions, ships drawing eighteen feet, often touched bottom and were liable to be damaged; since then, however, vessels drawing eighteen feet six inches have passed up and down through this channel, to and from

Wellington Basin, without any difficulty, which was a great saving to the owners, by not having to lighten their vessels six inches.

All the mechanical structures and other works in connection with this canal, have been kept in the best condition possible.

The weir and head-gates of the mills and factories at Basin No. 2, except those at Ogilvie's Royal Mills, received general repairs and four of the wicket or swing gates of Weir No. 4, were replaced by new ones and the bottom and side sheeting of the tail race renewed.

In accordance with permission granted to the Montreal Street Railway Company, a double track was laid by them on the Wellington Street bridge to cross the canal with their cars, the work being done in the manner and according to the conditions contained in lease No. 9,046, dated 25th May last.

The laying of this track has proved a great boon to the people residing in the Point St. Charles district, and has not interfered with the general trade over the bridge.

The old wooden stationary road bridge, which stood across the supply and regulating weir for the mills and factories, on the north-west side of the canal, at Lock No. 3, was removed and replaced by a new one.

The stone roads, approaches and ramps leading to and in connection with the bridges, basins, wharves, &c., as well as Mill Street received close attention and are in fair order.

The River St. Pierre, which passes through the Lachine swamp lands, as well as the new cut (three miles in length) which was made in 1878, through said lands, and all the off-take drains in connection with the canal, were thoroughly cleaned and kept in good order.

However, this new cut was entirely blocked up in September last; this was caused, as already reported to the Department, under date the 9th September, 1887, by the Grand Trunk Railway Company, in connection with the double tracking of of the Lachine division of the Grand Trunk Railway by depositing a large quantity of gravel at the junction of the old and enlarged River St. Pierre, at Brodie's culvert.

The weight of this gravel forced the black marl to move, thereby blocking the new cut completely for a distance of over one hundred feet in length, and flooding the lands above.

The Grand Trunk Railway Company was duly notified to remedy the evil complained of, and warned that, in case of claims being made, they were expected to bear the cost of damages sustained by the farmers or proprietors.

The electric plant for lighting the canal, from the lower entrance to St. Gabriel Lock, is now in full operation. There are one hundred and sixty 50-candle power lamps, of the Edison incandescent system, distributed one hundred and fifty feet apart, on line of canal, from Lock No. 1 to Lock No. 3, and around the basins between these two points.

The under water lead pipe cables, furnished by the agent of the Edison Light Company, having given out, they were replaced by new ones.

These cables have proved to be efficient and under the management of our electricians, this system of incandescent lighting has given satisfaction; but I still adhere to the opinion already expressed in my last annual report, that this mode of lighting is more suitable for inside lighting, and not to be compared for outside purposes, with the arc light, and I would here recommend that the latter system be adopted on this canal.

This change could be done at a comparatively small cost and once in force, would prove more efficient and less expensive.

The amount voted for repairs, for the fiscal year ending	
30th June last, was.....	\$20,000 00
The expenditure amounted to.....	19,999 64
Leaving an unexpended balance of.....	\$ 0 36

NEW WORKS.

During the month of February last, two foot passenger bridges, $3\frac{1}{2}$ feet wide outside, were placed on each side of the Mill Steet Bridge (No. 1).

This much-needed improvement, which has given entire satisfaction to the public, has cost \$2,059.42

A new iron swing bridge to replace the old wooden structure which stood over the old canal, immediately above Lock No. 5, at Lachine, was built under contract by Messrs. Rousseau & Mather, of the Montreal Bridge Company.

This bridge is eighty-five feet in length by eighteen feet wide, with a roadway of sixteen feet clear inside. It is a substantial structure and can be worked readily by one man.

The masonry in connection with it was built by our employés, the total cost being sub-divided as follows;—

Masonry in bridge seat, &c.....		\$1,698	17
Iron bridge as per tender.....	\$ 3,275	00	
Extras for alterations in dimensions.....	586	16	3,861 16
			<u>\$5,459 33</u>

BEAUHARNOIS CANAL.

This canal was closed on the 1st December, 1887, and re-opened to navigation on 1st May 1888.

No accident occurred and consequently there was no interruption to navigation during the fiscal year.

The work done during the lapsed year is described under two headings, viz.:—
Ordinary Repairs and Income

REPAIRS.

Lock and Lock Gates.

One pair of gates were built and placed in the lower end of Lock No. 10 and the old gates were brought down to the workshop and taken apart. The foot bridge of the lower gates of Lock No 14, was repaired and new knees placed to the lower gates of Locks Nos. 14 and 18. One of the sluice gates of Lock No. 10, was renewed and ladders placed in the man-holes of Locks Nos. 8, 10 and 12.

The gates of Lock No. 6, the upper gates of Lock No. 8 and the lower gates of Lock No. 12, were raised and new heel plates provided for same.

New lamps with their posts were erected at each of the locks and supplied with ladders for cleaning and lighting them.

Bridges.

Two new swing bridges were built and placed, one at the crossing leading to St. Timothy and the other one at Lock No. 8; the segment beds of these two bridges as well as those of the swing bridges at Locks Nos. 8 and 9, were renewed.

The swing bridges at Locks Nos. 7, 9, 13 and 14, were replanked and also the bridge over the waste weir at Lock No. 8.

Several farm bridges were rebuilt over the back ditches on the south side of the canal, and all the others maintained in good order.

Banks, Dykes, Dams, &c.

The dyke at Hungry Bay, which had been seriously damaged during the last fiscal year, underwent considerable repairs.

The excavation in the dyke caused by the waters of Lake St. Francis were filled, the slope of the road repaired and over three hundred toises of broken stone utilized in macadamizing about two miles of said road dyke, which were afterwards covered with gravel.

The canal banks have been maintained in good order.

The sides or slope were repaired and the canal bank on the towpath or north side has been macadamized for a distance of about two miles, the whole being covered with a layer of good gravel.

The culvert wells, discharges, drains and side ditches were cleaned last summer, and in the spring were cleared of snow and ice.

The weeds were removed on both sides of the canal at the proper time.

The mooring piers and wharves at the foot and head of the canal were kept in good order.

The wharf belonging to Mr. Daoust, of St. Timothy, which had been considerably damaged by the men employed in carting stone for the St. Zotique road was thoroughly repaired, and the landing wharf above the St. Timothy bridge on the south side was partially rebuilt.

Four new guard posts were placed, two at Lock No. 7, and one each at Locks Nos. 8 and 9.

One hundred and seventy-five mooring posts were set on both sides of the canal, where required.

Buildings, Fences, &c.

The lockmasters', lockmen's houses and lock shanties were repaired and painted, and the canal workshop was lengthened by twenty-two feet.

The sum voted for repairs for fiscal year 1887-88 was. \$14,350 00

The expenditure amounted to. 14,349 49

Leaving an unexpended balance of.....\$ 0 51

INCOME.

Main Feeder Buntin's Paper Mills.

A sum of \$5,000 having been placed in the Supplementary Estimates of 1887, and voted towards the rebuilding and enlarging of the main feeder to the paper mills of Mr. Buntin at Valleyfield, work was commenced in July of that year.

This feeder was widened by twelve feet and lengthened by at least fifty feet. The walls were taken down entirely on the south side and partly on the north side. The north side masonry was rebuilt with cement mortar, as well as fifty feet at lower end on south side, the remainder being dry rubble masonry.

The wing walls at the upper entrance of said feeder were built of cut stone cement masonry, resting on a concrete foundation.

The six old weir gates at the upper entrance were removed, thus giving an opening 50 by 10 feet, which gives between 400 or 500 cubic feet of water, instead of 144 cubic feet formerly supplied to the feeder through said wicket gates of 6 by 4 feet.

There are five head races or flumes opening from the main feeder on the lots leased to Mr. Buntin; one of these flumes, however, on lot No. 4, is not utilized by him. Another large flume with four sluice gates, 6 by 4 feet, was built at the lower end of the feeder which could be utilized when the Government lease lot No. 6.

A substantial iron fence was built on both sides of the feeder, and a bridge 50 by 36 feet placed over the upper entrance.

The amount voted towards this improvement was.....\$15,000 00

The expenditure amounted to..... 12,363 15

Leaving an unexpended balance of.....\$ 2,636 85

Telephone.

A private telephone line has been erected on this canal, between Melocheville and Valleyfield. There are nine stations, all connecting with each other and with head office at Valleyfield, an annual rent of \$25 being charged for this exchange connection.

This telephone service has proved very valuable, not only for the canal administration, but also for the interests of navigation.

The sum voted for this telephone line was.....	\$1,500 00
The expenditure amounted to.....	1,022 85
Leaving an unexpended balance of.....	<u>\$ 477 15</u>

CHAMBLY CANAL.

This canal was closed by ice on 1st December, 1887, and reopened on 8th May, 1888.

No accident occurred, and with the exception of three days' delay caused to navigation, not only on the Chamby Canal, but in all the eastern portion of Canada, by fogs and forest fires on the 27th, 28th and 29th of September, no detention was caused to the trade.

The work done during the fiscal year is described under two headings, viz.: Ordinary Repairs and Improvements chargeable to Income.

REPAIRS.

One pair of lock gates were built and placed in the upper recesses of Lock No. 3, and another pair in the lower recesses of Lock No. 8. Five pairs of old spare gates were repaired and placed under shelter in case of accident.

The gates of Locks Nos. 1, 4, 5 and 6 were repaired at their respective locks during the winter, and the iron work in connection with them overhauled. All the gates with their balance beams were painted.

The swing bridges were kept in good order and painted.

The dwelling-houses provided for the permanent men employed on the staff, and the guard houses at each of the locks were repaired and painted. Five of these dwelling-houses had their roofs covered with painted Canada plate and gutters placed where needed.

The canal workshops and outbuildings were whitewashed.

The west side of the long entrance pier at the foot of the canal at Chamby, was sheeted with two inch plank, placed perpendicular in order to better secure it against the action of the ice.

Fifty-three damaged mooring posts were removed and replaced by new ones.

Owing to the construction of the new by-wash above Lock No. 2, on south side of canal, the superintendent was enabled to easily unwater and clean the bottom of Locks Nos. 3, 4, 5 and 6, and to renew partially the bottom planking.

The masonry of the upper breast wall of Lock No. 3, which prevented the true mitring of the gates, was taken down and rebuilt.

Lapalme's by-wash, at the foot of Isle Ste. Thérèse, was rebuilt and the bridge way widened to twelve feet.

Considerable repairs were made to the garde corps between St. John's and Bridge No. 3; four miles in length of this railing being completely rebuilt.

The posts were set again and those which were decayed or otherwise damaged replaced.

The six inch square wooden top rail, which was expensive to keep in repair, has been replaced by a $\frac{3}{8}$ inch steel wire cable, with metallic caps on head of each post. This has not cost any more than the wooden rail and will last much longer.

It would be advantageous to continue the renewal of this railing or garde-corps ; for the remaining portion of it, once renewed as above, the cost of maintenance would be trifling.

A forge, for canal purposes, has been installed in a commodious building, convenient to the main workshops. The costly cartage from the private forge, at the village of Chambly Basin to the workshops, has been done away with ; the wrought iron and castings finished, which were furnished by the blacksmith, at the rate of eight cents per pound, are now purchased at trade price and prepared ready for the work in the canal shop at a cost not exceeding four cents per pound.

On the large quantity of iron employed during the fiscal year a considerable saving has been effected.

The slope walls were repaired and the canal bottom cleaned, during the month of April.

The walls of all the locks were pointed with Portland cement, and the projecting stones in the masonry trimmed.

Repairs to swing and road bridges, culverts, ditches, fences and ferry scows, have been made when required and in such a manner as to ensure the efficient working of the canal during the year.

Two additional docking trestles, were built with a view of converting Lock No. 7, into a dry dock for repairing vessels, which might be damaged in the canal or elsewhere.

The lower guide pier at Lock No. 5 was entirely rebuilt.

A lamp was placed on the east or towpath side of the canal, at each of the locks, to prevent accidents.

The Government ground surrounding the Superintendent's office at Chambly, which was in such a bad state as to make it an eye-sore to the public, has been levelled and covered with green turf ; gravel walks were made and trees planted, &c.

Muskrats' holes in the canal bank on the river side, at Ile St. Thérèse, were discovered in good time and the damage done speedily repaired, no delay being caused thereby to navigation.

The sum voted for repairs, for fiscal year 1887-88, was..	\$13,850 00
The expenditure amounted to.....	11,823 74

Leaving an unexpended balance of..... \$ 2,026 26

which it is the intention to utilize towards the purchasing of materials and machinery required for the erection of a saw mill and finishing shop in connection with the canal.

IMPROVEMENTS CHARGEABLE TO INCOME.

The work done on this canal during the lapsed fiscal year under the head of Income, is subdivided as follows :—

Rebuilding Upper Entrance Pier, St. John's.

This pier, which is fifteen feet in width, extends from above Jones' bridge for a distance of 1,450 feet, thus forming the harbor of St. John's.

It was formerly built on each face with two tiers of timber superposed, the sides being bound together by cross ties. The action of the ice and high waters had so disjointed it that the whole structure looked like a complete ruin.

This pier was entirely rebuilt, but with an additional tier. Bottom floorings were placed at every twelve feet alternately and bonded with large stones, and all the intervening spaces also properly filled with stones. The sides were sheeted with 2-inch plank placed perpendicular and the top covered with 2-inch pine plank, fifteen feet long.

The upper extremity of the pier has been protected by an ice breaker. This pier is now utilized by the teamsters for the towing of vessels in the harbor of St. John's.

The special appropriation for this work was	\$6,009 00
The expenditure amounted to.....	5,999 67
	33
Leaving an unexpended balance of.....	33

Dredging canal and raising banks.

The dredging fleet was employed from 1st July, 1887, to close of navigation in widening and deepening the canal between Wood's Creek by-wash to Jones' bridge. Several large boulders, which were a source of danger to vessels at low water, were removed.

Cuts of six hundred feet in length were made at each of the bridges Nos. 4 and 6, and elsewhere for the meeting of vessels, and the excavated material utilized in raising the towpath between Langelier's bridge and Ile Ste. Thérèse.

Several scow loads of puddle clay were deposited at Locks Nos. 1, 3, 4 and 6, and at site of proposed by-wash above Lock No. 2.

Owing to the extensive repairs to the machinery of the dredge, which were completed only in June, the dredge did not work during the two months following the opening of navigation.

The appropriation for dredging was.....	\$10,150 00
The expenditure amounted to.....	9,068 51

Leaving an unexpended balance of..... \$1,081 49

which will be utilized in purchasing in July: 1888, the coal required for the dredge.

Repairs to Canal Embankment (River Side).

Owing to the unprecedented high waters of the Richelieu River, in the spring of 1887, the canal embankment, on the east or river side between Langelier's bridge and Ile Ste. Thérèse, was partly washed away, for a distance of fully three miles; the dry stone wall facing on the river side gave way, and the towpath crumbled down so much so that at certain places, it did not measure more than eight or ten feet across.

Quarries were opened and stone purchased from several parties, and a special force detailed to rebuild the damaged embankment.

The bank has been raised at different points from 12 inches to 18 inches and widened to twenty feet, the east or river side being faced with a heavy dry rubble wall to protect it against the high spring waters of the Richelieu.

On the 20th June, 1888, this rubble wall was built as far as Depelteau's farm.

The appropriation for this special work was.....	\$12,500 00
The expenditure amounted to.....	10,636 84

Leaving an unexpended balance of..... \$1,863 16

which will be utilized during July and August, 1888, in completing the wall, as intended, as far as Ile Ste. Thérèse.

Rebuilding of Locks Nos. 1, 3, 4 and 6.

Considerable preparations were made during the fall of 1887, towards the rebuilding of portions of above named locks. Sixteen hundred barrels of cement and a large quantity of lumber, timber, iron, sand, cut and quarry stone were purchased

and employed in these works. Eleven derricks and a steam pump were placed in position where required.

At Lock No. 1, two coffer dams were erected above and below the lock to unwater it; all the masonry from above the lower recesses was taken down and rebuilt as well as the two guide piers at the upper end on each side of the upper entrance.

The west side chamber wall of Lock No. 3, from the lower to the upper recess, was taken down and rebuilt.

At Lock No. 6, the lower portion of the chamber on the west side, including the wing wall, recess and backing behind the same, as well as the chamber wall on the east side of the lock, were rebuilt.

On the 19th of April, when everything was ready for the opening of navigation it was discovered that through action of frost the west chamber wall of Lock No. 4 was projecting forward to such an extent that it was absolutely necessary to rebuild it.

Therefore 74 feet of the chamber, including the recess and wing walls, were taken down and re-built in the short space of 15 days, and on the 6th of May the canal was opened to traffic.

A few days after the water was let into the canal it was discovered that the west chamber wall of Lock No. 4, and last chamber wall of Lock No. 6, which had just been re-built, were standing out of line, which will entail the re-building of the backing next winter, in order to straighten the face walls.

This accident is, no doubt, attributable to the fact that the puddle trenches, at the upper extremities of said Locks Nos. 4 and 6, which had been filled some years ago, were empty. When let into the canal, the water found its way between the backing and walls, washing away the fresh cement, bringing down the backing against the walls and setting them out of line, as above stated.

By means of iron braces attached to a timber frame, placed in the ground, 20 feet behind the walls, these projecting portions were kept in position, and will stand during the present season, but it will be absolutely necessary to straighten them next winter.

The appropriation for this work.....\$35,000 00

The expenditure amounted to..... 34,999 95

Leaving an unexpended balance of..... \$ 0 05

By Wash above Lock No. 2.

This important improvement which was strongly urged in my last annual report has been made.

This by-wash has been located 300 feet above Lock No. 2, on the east side, and at the foot of the long reach, which extends from the guard lock at St. John's, a distance of about $9\frac{1}{2}$ miles.

This stretch of canal contains the water of a branch of the Richelieu River, known as the "Petit Chenal" of the Rivière des Iroquois, and of numerous ditches and farm drains on each side.

When the bridge piers at Bridge No. 1 will be ready to receive the stop logs to be provided, accidents to the bank which were formerly frequent in that portion of the canal, will seldom occur, if at all, and in the event of such an occurrence, the damage will be repaired with hardly any detention to navigation.

The frame work of this by-wash is 12 feet in height, with an opening on the canal measuring 24 feet, and on the river side 16 feet 6 inches, provided with three wicket gates of 4 feet by 3 inches each

The tail-race, which is 378 feet long by 14 feet wide, extends to the Richelieu River, with a surface fall of 25 feet.

A dry rubble wall has been built, one on each side of the raceway, but in order to prevent them from being undermined by the water rushing through it, the bottom will have to be sheeted with plank for a certain distance.

A traffic bridge, 30 feet by 16 feet, was built on the public road, at the crossing of the tail race, 200 feet from said by-wash.

This by-wash has proved very useful in keeping dry the bottom of the locks under course of reconstruction last winter, as it was not necessary to erect any dam or use a steam pump.

The appropriation for this work was.....	\$3,500 00
The expenditure amounted to.....	3,499 72
Leaving an unexpended balance of	\$ 0 48

Renewal of Machinery of Dredge No. 1.

The dredging fleet was thoroughly overhauled and repaired during the winter; the hull of the dredge and scows were caulked and painted.

The machinery of the dredge was partly renewed; a new steel boiler was purchased and placed in position, the engine proper repaired, and a new 1-inch crane chain provided to replace the old one, which was too weak.

The amount granted was.....	\$5,800 00
The expenditure amounted to.....	5,799 83
Leaving an unexpended balance of	\$ 0 17

Building Telephone Line.

A private telephone wire was strung by the Bell Telephone Company on their posts for the use of this canal between St. John's and Chambly.

Telephone lines, connecting the canal workshop, the Superintendent's residence and office, and the Collector's residence and office with the main line, were also erected by our own men.

There are three distinct telephone lines converging to the Superintendent's residence or office as required, besides an exchange connection at Chambly agency of Bell Telephone Company, for which an annual rental of \$25 is paid.

These isolated lines converging to the Superintendent's office or residence enable him to have a constant supervision over the canal and render the management much more efficient.

There are nine telephonic stations on the main line between Chambly and St. John's, four on the line connecting the workshops, and four on the Superintendent's line, including the Montreal agency at Chambly Basin.

Ample provision of tools, exchange apparatus and material for repairs of said lines has been made, and the lines are kept in proper order by our own employes.

It is estimated that the telephone service on this canal effects a yearly saving of the cost of its erection by doing away with carriage hire, delay to works and otherwise giving facility to prevent accidents.

The only trouble experienced is the induction with the line of the Bell Telephone Company, which is strung on the same poles as our line between Chambly and St. John's. The company intend to sell their line, and I would here advise its purchase by the Government in order to improve the service on the main line.

The sum voted for this work was.....	\$1,500 00
The cost of erection amounted to.....	1,244 95
Leaving an unexpended balance of.....	\$ 255 05

Portion of which it is the intention} to utilize in completing and improving the service.

New Steam Dredge.

A new steam dredge and scows under construction for service on the lower division of the St. Lawrence Canals are now completed and will be despatched to do the dredging contemplated on the Beauharnois Canal, as provided for in fiscal year estimates for 1888-89.

The appropriation voted towards the construction of this dredging fleet was.....	\$19,240 00
The expenditure amounted to	19,238 65
Leaving an unexpended balance of.....	<u>\$ 1 35</u>

ST. OURS LOCK.

This lock was closed to navigation on 25th November, 1887, and re-opened on 19th April, 1888.

There was no accident, nor was it necessary to impose any fine for violation of canal regulations.

The walls of the lock were pointed where required and the bottom cleared of sand and gravel. Some leaks under the mitre sills and walls of the lock were stopped with gravel. The lock gates were also raised and adjusted.

The old lock gates which had been repaired during last summer were placed under a shed, which was built for that purpose, to keep them in good order.

One of the lower piers which had been damaged by the high spring water was repaired and refilled with stone.

Nine scow loads of gravel were unloaded along the upper side of the dam to prevent damages to foundations.

The banks of the island at the north-west or upper extremity of the lock were protected with stone purchased for that purpose.

The ice was cut away from the piers and lock gates, and the gates were loaded to prevent their being lifted by high water in the spring.

The booms were removed in the fall, placed in winter quarters and replaced in the spring.

Thirteen wheelbarrows were made and fourteen old ones repaired.

The Superintendent's house, outbuildings and fences received some repairs and were kept in good order.

The scows for the repairs of that station, as well as the ferry scow, were repaired and the mooring posts and lamp posts were renewed where required.

Preparations are now being made towards overhauling the foundations of the lock, which have shown signs of weakness; an appropriation of \$50,000 having been affected for that purpose.

The sum voted for repairs on the St. Ours lock and dam, was.....	\$2,975 00
The expenditure amounted to.....	2,801 17
Leaving an unexpended balance of.....	<u>\$ 173 83</u>

RICHELIEU RIVER.

The survey on the Richelieu River between Rouse's Point and Chambly, was continued during the year. All the lowlands between St. John's and Rouse's Point [1888]

as well as South River were explored and surveyed. A complete survey of the River St. John's and Fryer's Island with soundings was also made.

I append the report of Mr. L. G. Papineau, C. E., P. L. S., in charge of the survey on the subject.

I have the honor to be, Sir,

Your obedient servant,

E. H PARENT,
Superintending Engineer.

A. P. BRADLEY, Esq.,
Secretary Railways and Canals, Ottawa.

LACHINE CANAL.

STATEMENT of Amounts collected for Wood Dues and Winterage of Vessels during the Fiscal Year ended 30th June, 1888.

Date.	Items.	Amounts.
		\$ cts.
1887-88....	Wood dues	466 48
	Winterage	91 56
	Total.....	558 04

JOHN O'NEILL,
Collector.

CANAL OFFICE,
MONTREAL, July, 1888.

LACHINE CANAL.

STATEMENT of Basin, Wharfage and Bank Dues collected during the Fiscal Year ended 30th June, 1888.

Date.	Items.	Amounts.
		\$ cts.
1887-88....	Basin dues.....	1,720 56
	Wharfage dues.....	47 97
	Bank dues	21 00
	Total.....	1,789 53

J. B. DESCHAMPS,
Pro Collector.

CANAL OFFICE,
LACHINE, July, 1888.

LACHINE CANAL.

STATEMENT of Fines and Damages collected during the fiscal year ending
30th June, 1888.

Date.	Names of Vessels.	Name of Owners.	Fines.	Damages.	Totals.
1887-88.			\$ cts.	\$ cts.	\$ cts.
Nov. 16....	Schooner Reine des Agnes.	N. Pagé .....	.....	8 00	8 00
June 22....	Raft of floated timber.....	J. B. & Grier.....	10 00	.....	10 00
		Totals	10 00	8 00	18 00

CANAL OFFICE,
MONTREAL, July, 1888.

JOHN O'NEILL,
Collector.

BEAUHARNOIS CANAL.

ATEMENT of Fines and Damages collected during the Fiscal Year ended
30th June, 1888.

Date.	Names of Vessels.	Name of Owners.	Fines.	Damages.	Totals.
1887.			\$ cts.	\$ cts.	\$ cts.
July 5.....	Barge "Ontario"	Ogdensburgh C. & T. Co...	10 00	.....	10 00
Nov. 9.....	Propeller "Acadia"	A. H. Malcomson. ....	.....	20 00	20 00
		Totals	10 00	20 00	30 00

CANAL OFFICE,
MELOCHEVILLE, July, 1888.

J. F. BEIQUÉ,
Superintendent.

CHAMBLY CANAL.

STATEMENT of Fines and Damages collected during the Fiscal Year ended 30th June, 1888.

Date.	Name of Vessels.	Name of Owners.	Fines.	Damages.	Totals.
1887.			\$ cts.	\$ cts.	\$ cts.
July 1 ...	Scow "Union St. Joseph" ..	P. St. Amand.....	.....	19 60	19 60
do 21...	do "St. Bernardin"	G. Gill	5 00	.....	5 00
Aug. 6 ...	Barge "Robins"	C. Robins	5 00	.....	5 00
do 22...	do do	do .....	.....	2 00	2 00
do 22...	Scow "M. Robidoux"	M. Robidoux .....	.....	6 00	6 00
Sept. 2 ...	do "St. Bernardin"	G. Gill .....	.....	4 00	4 00
do 26...	Barge "Cooper"	A. Cardinal .....	.....	1 50	1 50
do 28...	Scow "Providence"	E. Vairille .....	.....	2 50	2 50
Nov. 3 ...	do "St. Joseph"	E. Lussier.....	.....	2 50	2 50
1888.					
June 27—	Barge "Jessie Billings"	J. Lowell.....	.....	2 60	2 60
		Totals.....	10 00	40 70	50 70

D. MARTEL,
Collector.

CANAL OFFICE,
CHAMBLY, July, 1888.

LACHINE CANAL.

STATEMENT showing the Depth of the River Water on the Mitre Sills of Lock No. 1 at lower entrance and Lock No. 5 at upper entrance during the Fiscal Year ended 30th June, 1888. (From Lockmaster's Returns.)

Months.	Lock No. 1, Lower Sill.		Lock No. 5, Upper Sill.	
	Highest.	Lowest.	Highest.	Lowest.
1887.	ft. in.	ft. in.	ft. in.	ft. in.
July.	19 7	18 8	12 7	11 10
August	18 7	17 4	11 9	10 11
September	17 6	16 6	11 0	10 4
October	16 11	16 3	10 8	10 2
November.....	16 6	15 10	10 4	9 10
December.....	30 10	16 0	11 3	9 10
1888.				
January	33 8	26 3	11 7	9 7
February	28 1	24 0	11 7	8 2
March	28 6	24 8	10 7	8 10
April	36 3	22 2	11 9	10 6
May	24 8	21 0	14 11	11 11
June	23 0	20 11	14 10	12 10

BEAUHARNOIS CANAL.

STATEMENT showing the depth of the river water on the Mitre Sills of Lock No. 6, at lower entrance, and Lock No. 14, at upper entrance, during the fiscal year ending 30th June, 1888. (From Lockmaster's Return.)

Months.	Lock No. 6, Lower Sill.		Lock No. 14, Upper Sill.	
	Highest.	Lowest.	Highest.	Lowest.
1887.	ft. in.	ft. in.	ft. in.	ft. in.
July	13 ¾	11 9	13 0	12 1
August	11 10	11 4	12 3	11 10
September	11 2	10 4	12 3	11 9
October	10 3	10 0	12 1	11 2
November	9 11	9 8	12 0	11 0
December	13 0	9 11	12 0	10 10
1888.				
January	22 6	13 0	12 11	11 10
February	22 0	17 6	12 4	9 11
March	23 1	18 0	11 11	10 3
April	18 0	13 0	12 6	11 10
May	14 10	11 2	12 4	11 11
June	13 6	12 7	12 2	11 10

CHAMBLY CANAL.

STATEMENT showing the Depth of the River Water on the Mitre Sills of Lock No. 9, at lower entrance, and Lock No. 1, at upper entrance, during the Fiscal Year ending 30th June, 1888. (From Lockmaster's Returns.)

Months.	Lock No. 9, Lower Sill.		Lock No. 1, Upper Sill.	
	Highest.	Lowest.	Highest.	Lowest.
1887.	ft. in.	ft. in.	ft. in.	ft. in.
July	12 6	10 10	9 6	8 3
August	11 2	9 6	8 9	7 6
September	9 8	8 6	7 8	7 0
October	8 8	7 9	7 10	7 0
November	10 4	7 6	8 0	6 5
December	12 4	9 4	8 0	7 6
1888.				
January	13 8	11 7	8 0	7 4
February	14 1	12 10	8 2	7 3
March	18 5	12 9	9 4	7 5
April	20 0	16 6	10 6	9 4
May	18 5	16 2	12 6	9 7
June	16 1	12 10	12 4	10 7

ST. OURS LOCK.

STATEMENT showing the depth of the River Water on the Mitre Sills of St. Ours Lock during the Fiscal Year ending 30th June, 1888. (From Superintendent's Return.)

Months.	Lock No. 1, Lower Sill.		Lock No. 1, Upper Sill.	
	Highest.	Lowest.	Highest.	Lowest.
1887.	ft. in.	ft. in.	ft. in.	ft. in.
July	11 3	9 9	10 8	9 4
August.....	9 10	8 4	9 8	8 4
September.....	8 4	7 3	8 9	7 11
October.....	8 3	6 8½	8 2	7 8
November.....	7 9	6 7	9 4	7 4
December.....	10 9	7 9	9 8	8 7
1888.				
January.....	11 10	10 5	9 2	8 4
February.....	10 11	9 9	9 0	8 5
March.....	15 5	9 10	12 0	8 8
April.....	20 0	16 7	16 0	13 3
May.....	18 7	15 2	14 11	13 3½
June.....	16 3	12 10	13 2½	10 11

APPENDIX No. 8a.

SUPERINTENDING ENGINEER'S OFFICE,

MONTREAL, 9th November, 1888.

SIR,—I beg to enclose herewith, to be annexed to my annual report, forwarded to the Department on the 29th ultimo, the annual report of Mr. L. G. Papineau, C. E., P. L. S., on the hydrographic survey of the Richelieu River for the fiscal year 1887-88.

I have the honor to be, Sir,

Your obedient servant,

E. H. PARENT,

Superintendent Engineer.

A. P. BRADLEY, Esq.,
Secretary Department of Railways and Canals,
Ottawa.

RICHELIEU RIVER SURVEY,

ST. JOHN, 1st July, 1888.

SIR,—In reference to the hydrographic surveys made by my assistants and myself under your superintendence during the fiscal year ending 30th June, 1888, I have the honor to report that the survey of Richelieu River, between St. John's and the United States boundary, was completed by the examination of the low lands adjoining the Richelieu, from Sabrevois to South River, on the east shore, and from the Village of St. Valentine to Sturgeon Point on the west shore.

In September, 1887, we made an examination of South River, in view of ascertaining what improvements could be made to the bed of this stream, for navigation purposes and a direct communication with Missisquoi Bay, and also how the neighboring lands would be affected by a change of level in the Richelieu.

In October the survey above referred to was interrupted and we returned to St. John's, to resume the examination of that portion of the river, below the St. John's Rapids. This survey was continued as far as the head of Isle St. Thérèse Rapids $7\frac{1}{2}$ miles distant from St. Johns.

Towards the end of November we returned to St. John's and resumed office work. We were engaged up to June of the present year in completing the plans of the river from St. John's to Rouse's Point, adding to the work already done the survey of the low lands made during 1887 and reducing these plans to a smaller scale, and also in preparing plans and profiles having reference to the project of the Hydraulic and Manufacturing Company of St. John's and Iberville, for the improvement of the Richelieu River.

The plans of the upper portion of the Richelieu made to a scale of 1,000 feet to one inch, now deposited in your office, form a complete series which could be put together to form a sheet of convenient dimensions and would give valuable information to the navigation if it was printed and published.

I have the honor to be, Sir,

Your obedient servant,

L. G. PAPINEAU,

Assistant Resident Engineer.

E. H. PARENT, Esq.,
Superintending Engineer of Canals,
Montreal.

APPENDIX No 9.

OTTAWA RIVER CANALS.

SUPERINTENDING ENGINEER'S OFFICE,

OTTAWA, 14th August, 1888.

SIR,—I have herewith the honor to transmit my annual report for the fiscal year ending 30th June, 1888, upon the Ottawa River Canals.

CONSTRUCTION.

All works coming under the head of "Construction" were completed prior to the 30th June, 1887.

MAINTENANCE.

Ste. Anne's Canal.

This canal was closed on the 28th November, 1887, and reopened for traffic on the 2nd May, 1888.

Ordinary repairs have been made to the locks and lock gates, the guide lights for the upper entrance, Government buildings, roads, fences, &c., and eight buoys have been placed above and below the locks for the better guidance of vessels. Two day signals for the upper entrance channel have been also provided.

A length of eighty feet of old protection cribbing, south of the old lock, has been completely renewed, and 230 feet above the same lock has received necessary renewal and repair, inclusive of the ice breaker at its head.

The pier work here is now all in good order excepting that built by the Grand Trunk Railway Company in 1853-54, south of the canal basin, which still wants attention.

CARILLON CANAL.

Lock Nos. 1 and 2

Ordinary repairs to the lock gates and machinery have been made here, and the towing path, fences, roads and bridges have received the necessary attention.

A wharf for the deposit of fuel, supplies, &c., for steamers, and which was much needed, was built during the winter of 1887-88 on the north side of the canal, close to the outlet lock. This wharf is composed of a row of crib work 100 feet long, ten feet wide and nine feet high.

This canal was closed on 30th November, 1887; reopened, 2nd May, 1888.

GRENVILLE CANAL.

Locks Nos. 3, 4, 5, 6 and 7.

The same remarks apply here as to the Carillon Canal. It was closed and opened on the same dates. Such repairs as were found necessary received attention. Locks, lock gates, roads, fences, towpaths, slopes with all the various bridges and culverts have received careful examination and, where needed, repair or renewal.

I would remark here that new swing bridges will ere long have to be erected at Locks Nos. 5 and 7. The old ones are rapidly getting past repair, rendering their substitution a necessity.

CULBUTE CANAL.

Such repairs as were absolutely necessary have been done at the locks here and at the draw bridge at Chapeau Village.

With the exception of an occasional steamer, belonging to the Upper Ottawa Improvement Company, nothing has passed through the locks during this year.

I have the honor to be, Sir,

Your obedient servant,

D. STARK,

Superintending Engineer.

A. P. BRADLEY, Esq.,

Secretary Department of Railways and Canals,
Ottawa.

 APPENDIX No. 10.

CORNWALL, 11th August, 1888.

SIR,—Enclosed herewith please find annual report on the Cornwall Canal, for the fiscal year ended 30th June, 1888.

I have the honor to be, Sir,

Your obedient servant,

D. A. McDONELL,

Superintendent.

A. P. BRADLEY, Esq.,
Secretary Department of Railways and Canals,
Ottawa.

CORNWALL, 11th August, 1888.

SIR,—I have the honor to submit the following annual report on the works under my charge, for the fiscal year ended 30th June, 1888.

The Cornwall canal was maintained in an efficient state, until the 4th December, 1887, when it was closed by ice; was opened for navigation on the 2nd of May, 1888, and continued in good working order up to the 30th June last.

The work executed during the past season comes under the head of ordinary repairs and construction.

Rebuilding one pair lower lock gates.

General repairs to all lock gates, supply weirs and bridges.

Making seven new lock gate knees, ten sheaves.

Raising pier at foot of canal, by three courses of timber.

Raising embankment from Gault Factory to Lock No. 18, to guard against the rise of water, when the ice shoves in winter.

Repairing slope walls, cleaning out side ditches and drains, and repairing lock houses.

I have the honor to be, Sir,

Your obedient servant,

D. A. McDONELL,

Superintendent.

A. P. BRADLEY, Esq.,
Secretary Department of Railways and Canals,
Ottawa.

APPENDIX No. II.

WILLIAMSBURG CANALS.

MORRISBURGH, 15th August, 1888.

SIR,—I have the honor to submit my report of the working and condition of the Williamsburgh Canals (embracing the Farran's Point, Rapide du Plat, Point Iroquois Junction and Gallops Canals) for the fiscal year ending the 30th June, 1888.

These canals were maintained in good order and without any interruption to navigation during the season thereof; they were closed for the winter on the 5th of December, 1887, and re-opened on the 2nd May, 1888.

FARRAN'S POINT CANAL.

A new block was placed on the coping for hanging lock gate and a new knee was put into lockgate. General repairs were also done to both upper and lower gates of the locks. The sheaves defective in chain-holes were removed, and new ones placed instead. The ice breaker and pier at the foot of the canal injured by ice owing to the high water at the time of the ice breaking up this spring, will require to be repaired during this fall. The banks are in good repair.

RAPIDE DU PLAT CANAL.

The new lock gates and lock at the head at this canal have been in use since the opening of navigation this spring. Repairs necessary were done to the lock gates at Lock No. 23, at the foot of the canal. The pier at the head of this canal injured by the ice at the breaking up will require to be partially rebuilt. The pier and dock at the foot of the canal were repaired and the banks kept in good order. Some difficulty was experienced during the early part of the season from the low water in the River St. Lawrence, and in keeping up the canal to its proper depth while locking, but this will be remedied by the supply weir now in progress of building.

IROQUOIS JUNCTION AND GALLOPS CANAL.

The gates at Lock No. 25, Iroquois, were taken out and rebuilt. The gates at Locks No. 26 and 27 received repairs where requisite. The swing bridges at Locks Nos. 25 and 26 received repairs and were kept in good order. The banks and several piers on these canals, as well as the booms in Point Iroquois Canals have been duly maintained. The buoys on the St. Lawrence under my charge between Johnstown and Dickinson's Landing were replaced this spring, and maintained in their proper positions.

The buoy boat and repair scow were repaired.

I annex a statement showing the depth of water on the sills of the several locks at the entrances and outlets of these canals during the year.

I have the honor to be Sir,

Your most obedient servant,

A. G. MACDONELL,

Superintendent Williamsburgh Canals.

A. P. BRADLY, Esq.,
Secretary, Department of Railways and Canals,
Ottawa.

STATEMENT showing the Extreme Depth of Water on the Mitre Sills of the several Locks during the year ended 30th June, 1888.

FARBAN'S POINT CANAL.

Months.	Lock No. 23, Lower Sill.		Months.	Lock No. 22, Lower Sill.	
	Highest.	Lowest.		Highest.	Lowest.
1887.	ft. in.	ft. in.	1888.	ft. in.	ft. in.
July.....	11 3	10 9	January.....	10 3	8 0
August.....	10 9	9 10	February.....	10 5	7 5
September.....	10 4	9 4	March.....	9 2	8 0
October.....	10 0	9 4	April.....	9 8	8 10
November.....	9 6	8 6	May.....	9 8	8 10
December.....	9 4	8 2	June.....	9 9	9 4

RAPIDE DU PLAT CANAL.

Months.	Lock No. 23, Lower Sill, Foot of Canal.		Lock No. 24, Upper Sill, Head of Canal.	
	Highest.	Lowest.	Highest.	Lowest.
1887.	ft. in.	ft. in.	ft. in.	ft. in.
July.....	11 4	10 9	11 6	10 6
August.....	10 9	9 11	10 9	10 3
September.....	10 7	9 0	11 0	9 8
October.....	10 4	9 0	11 6	8 10
November.....	9 1	8 4	9 6	8 3
December.....	9 1	7 8	9 0	8 0
1888.				
January.....	9 6	7 9	8 9	6 6
February.....	8 6	6 8	7 3	5 10
March.....	8 10	7 1	8 3	6 9
April.....	9 6	8 4	9 10	8 3
May.....	9 6	8 9	10 6	9 3
June.....	6 9	9 0	10 3	9 5

POINT IROQUOIS AND GALLOPS CANAL.

Months.	Point Iroquois Canal. Upper Sill—Lock No. 25. Foot of Canal.		Gallops Canal. Upper Sill—Lock No. 27. Head of Canal.	
	Highest.	Lowest.	Highest.	Lowest.
1887.	ft. in.	ft. in.	ft. in.	ft. in.
July.....	14 6	10 8	11 11	11 2
August.....	13 11	12 6	11 7	10 9
September.....	13 6	11 9	11 6	10 0
October.....	14 0	11 9	11 6	9 11
November.....	12 0	10 11	10 5	9 0
December.....	11 9	10 3	10 0	9 2
1888.				
January.....	11 0	8 6	9 6	8 5
February.....	9 6	8 0	8 7	7 6
March.....	10 11	8 9	9 10	8 2
April.....	12 3	10 7	10 4	9 3
May.....	12 4	11 0	10 4	9 11
June.....	12 6	11 10	10 6	9 8

 APPENDIX No. 12.

 WELLAND CANAL.

SUPERINTENDENT'S OFFICE,

ST. CATHARINES, 4th October, 1888.

SIR,—I have the honor of herewith submitting my report on the condition of the working of the three canals under my charge, viz. ; the Old, the New, and the Feeder, for the year ending 30th June, 1888.

The canals have been operated successfully throughout the year without serious accident.

The harbor at Port Colborne requires widening opposite the elevator, without further delay, to afford safety for the long vessels now using it, this is more particularly shown on the plan I forwarded to the Chief Engineer last year. The harbor at Port Dalhousie requires to be dredged next spring on the east side, where there is for a considerable distance only from 4 to 9 feet of water for a distance of 40 feet out from the face of the pier, rendering it impossible for vessels to tie up for that long stretch.

The canals were closed on 5th December, 1887, and opened 1st of May, 1888.

I have the honor to be, Sir,

Your obedient servant,

WILLIAM ELLIS,

Superintendent.

A. P. BRADLEY, Esq.,

Secretary Department of Railways and Canals.

Ottawa.

NEW WELLAND CANAL—DETAILS OF WORK OF REPAIRS AND MAINTENANCE,

DIVISION No. 1.—FROM PORT DALHOUSIE HARBOR TO LOCK No. 13.

Port Dalhousie Harbor.

Removed rotten top timbers at various places and replaced with new.

Gate Yard and Shop (Port Dalhousie).

Built new shed for storing timber, lumber, tools and engines ; size, 115 by 35 feet ; 14 feet posts.

Built new pile driver with steam hoisting apparatus and engine ; size of scow, 22 by 40 feet ; 5 feet depth of hold, leaders 45 feet high, plated with iron.

One hundred and fourteen new snubbing posts turned, and 20 new posts, extra size, made for spare posts.

Two scows drawn out on skidways, caulked and generally overhauled and repaired and re-launched; the other scows, pontoons, floats, &c., were all carefully put away and moored for the winter; the old land pile driver repaired and put on scow for floating use; sheet pile driver repaired and put in good order; made fifty new extensions, five new gates (for fences), one hundred new wedges, ten lamp ladders, two bridge ladders and five lock ladders. Scow "Red Rover" overhauled and made into a ferry scow for Chippewa Creek; the old floating pile driver scow leaders and top work all taken off and scow repaired and sent to Dunnville. Platforms and stairs made and put down at lock houses, also stairs for descending banks to water closets; twenty new ladders made for Division No. 2. Bridge notice boards and posts made, painted and put up at several swing bridges; all valuable timber for winter stored away in shed built for that purpose; new shutters made and fitted on storekeeper's house.

Lock No. 1, Bridge No. 1, and Level.

Put on two new long opening cables to lock gates; twenty-four water wheels and four shafts repaired; also two bridges and one binder on head of lock gates; put on five new brass matrixes, one new sheave and two cranks, twenty-one sets gearing and 13 shafts repaired; put on four walings, also twelve new steel water wheel shafts; twelve shaft boxes cast and rabbeted, twelve couplings, twelve top cast boxes, twelve lignum vitae boxes, and twelve oak shaft fenders and four new short shafts in water wheels; put on one new foot bridge, 6 by 31 by 26 oak; 37 rag bolts put in head gate sills, and twenty-five rag bolts drove in foot gate sills and sill bed; seven round iron piles, $2\frac{1}{2}$ inches in diameter, 9 to 12 feet long, drove through mitre sills; sills, braces and king sill, with pile driver, heads of piles rounded and countersunk and washers of flat iron; put on one new screw, two new intermediate gears, one short cable and one new valve, seventy-five cords of stone put in at foot of retaining wall, to prevent wall and side of bank sliding into channel; bridge replanked and screwed up truss rods, set cams, and put plates on top chord.

Lock No. 2 and Level.

Repaired hand rail and lifting rod; also 11 water wheels. Put on new extension pieces, new spur and crown wheel, 1 new valve crank, 2 new brass matrixes and washers, and 1 new short cable. Repaired 13 water wheel shafts, 3 cables, and 1 intermediate gear. Cut stone out for drum box, repaired crib and 4 set of locking chains; 3 new pinions and 3 sets of shaft walings put on.

Lock No. 3, Bridge No. 2 and Level.

Repaired 7 water wheel shafts, 6 walings, 2 pinions and set screws; also 2 sets of locking chains and sister hooks, and 3 sets of gearing. Put on 15 new wood boxes and 1 new cable. Repaired 5 water wheels, and 12 water wheel shafts capped, and 2 new extension pieces put on; also 1 new intermediate gear, one collar repaired, and new cone roller frame put in. Dressed out stone for crab drum box, and repaired crab and locking chains. Put on 1 new mast and long shutting chains.

Swing bridge re-planked and cut locking block on rest piers, and put spliced plates on top chord where broke. Towpath bridge replanked. 4,942 yards ditches opened from Lock No. 3 to Welland Canal avenue to carry soakage water from canal and sewerage water from St. Catharines.

Lock No. 4 and Level.

Eight sets of gear repaired; 2 new crown wheels and pinion put on; 1 crab, 2 valve cranks repaired; painted snubbing posts. 15 new wood boxes, 20 wood screws, 3 cone rollers, 1 extension, 2 guards, 1 waling, 12 caps for shafts and 1 bronze pinion put on.

Repaired 1 cannon, 6 shafts, 2 valves, 2 water wheels, 2 crabs and 1 crab drum; extension to foot boards; repaired and put rests under hand rail; cone roller frame repaired and new roller put in; 1 new piece of wheel shaft put in, and balance repaired.

Towpath bridge replanked.

Lock No. 5 and Level.

One new extension, 3 new pinions, 2 new pinion cables, 6 new wood boxes, 12 new caps to cover top of wheel shafts, 5 new brass matrixes, 2 brass washers, 1 new locking gear and chain put on lock gates. Seven sets of gearing repaired, and 2 sets shifted; 5 water wheels and 1 opening cable and chain repaired; 1 new steel plate put in for turntable. Repaired hand rail and put piece under to receive ends of rail, and put in 1 set screw, 2 new shaft guards and 1 new shutting chain.

Painted snubbing posts.

Bridge No. 3, Lake Street.

Floats repaired; 24 new chains and eye-bolts, new fenders and 24 new shackles, 2 new pieces of pine, 12 by 12 feet 30 feet long, put in floats; the end cribs have been built up three courses higher with 12 by 12 feet timber, and the crib filled up with stone; approaches repaired.

Bridge overhauled and put in good working order and replanked. Screwed up truss rods and put spliced plates on top chord.

Bridge No. 4, Railway Bridge.

Floats repaired with 8 new chains, plates and eye bolts, 3 pieces, 12 by 12 inch pine, 30 feet long put in float cribs at both ends of bridge; raised 3 courses 12 by 12 inch pine and filled up with stone. Put new waling in bridge and replanked. Put new cams and rests on rest pier, also new safety rollers under bridge.

Lock No. 6, and Level.

Repaired twenty-four sets gear, seven water wheel shafts, one extension, three cone rollers, two water wheels, two crabs, two valve hoods, and one clifting rod; put on two new crown water wheels, three pinions, four new steel opening cables (long), two short cables and two new brass matrixes, new plate put between friction of turntable.

Took stone out of mitre sill, repaired two sets lookings and sister hooks; waste weir bridge replanked and new stringers put under. Built 1,368 feet, fences.

Lock No. 7, Bridge 5, and Level.

Repaired five water wheels, one crab, four sets gearing, two cone rollers, three sets locking chain, and put on two new cranks (for valves) twenty-seven new shaft boxes, two new pinions, one new cone roller, two shaft walings, one set screw gearing, four new brass matrixes, one new clutch and standard, one new shutting chain, and three new shaft fenders, changed all the gearing from fast to slow motion. Took out bent shaft repaired it and replaced. Repaired broken valve and removed piece from between gate and sill; built 2,700 feet fencing and repaired 120 feet.

Bridge No. 6, Niagara Street.

Repaired floats with nine new shackles, 5 new eye bolts, and put in three pieces of pine 12 inches by 12 inches by 30 feet long; three pieces oak waling put in bridge; and broken plank replaced by new ones; one piece of oak put in for cluster pile brace, put new piece of timber in section of top chord with spliced plates in bridge 250 yards of earth were put in to raise lot at bridge approach, also 264 feet of fence built and 1,300 feet ditching.

Lock No. 8, and Level.

Repaired 9 sets gearing, 3 shafts, 2 set locking chains, 2 waterwheels and 3 crabs; put on 2 new long opening cables, 2 new pinions, 1 new bridge, 10 bridge bolts, 2 new intermediate gear, 1 extension, 15 wood, 5 shaft boxes and 2 new shutting chains, 6 sets of gearing changed from old to new and 2 new valve screws put in, removed stone from mitre sill and put two iron straps from bridge to lock gate to hold bridge down, spliced one cable.

Lock No. 9, and Level.

Repaired 2 sets gearing and put on 3 new shafts, 6 shaft walings, 10 wood shaft boxes, 1 new pinion, 1 new short opening cable, 2 new cone rollers, 1 new crown water wheel and new caps on top of shafts, also repaired 2 shutting chains, 3 water wheels and shaft boxes for same; repaired 2 valves and 1 extension, also 1 collar, and put iron plate to bridge, 4 feet long, 4 inches wide, $\frac{5}{8}$ inch iron, 2 through bolts $1\frac{1}{2}$ inch by 3 feet long. Took out broken binder and put in new one bolted through bridge.

Bridge No. 7, (Queenston Road).

Put 3 new pieces pine. Five new plates, chains and eye-bolts in floats. Cribs at each end raised 3 courses of timber, 12 inches by 12 inches, and filled up with stone. Floats patched up to answer until new ones could be made.

Built 2 new bridges over ditch at public highway.

Screwed up truss rods of swing bridge, and put long plate on top chord where broken.

Lock No. 10, and Level.

Repaired 2 water wheels, 3 shafts, 7 sets gearing, 3 crabs and levers, 1 set locking gear, 2 valves, 2 opening cables, 1 shutting chain.

Put on 15 new wood boxes, 2 new pinions, 2 new crown water wheels, 1 new intermediate gear, 7 new brass matrixes, 2 new long opening cables, and put brass washers and steel plate under spur wheels, 3 pieces shaft waling and 2 extensions put on. Took stone out of mitre sill and repaired 2 valve screws and put stay rods from bridge to gate. Took out left No. 1 lock gate and hung a new spare gate in place, changed all gearing and machinery from old gate to new, put on new waling for gearing guards, new shaft waling, 6 wood boxes, 3 new water wheels and cut away corbel for cross heads and put new stay rods on right No. 1 gate.

Bridge No. 8, Homer Road.

Repaired floats with three eye-bolts, seven shackles and one new strap; put one piece pine, 12 inches by 12 inches, by 22 feet, in bridge; truss rods screwed up and put spliced plates on top chord; cribs at both ends of bridge raised three courses, 12 inch by 12 inch pine, and filled up with stone; floats overhauled and put in order; two new fence gates hung, and 120 feet of fencing repaired.

Lock No. 11, and Level.

Repaired shutting chains and adjusted screws; repaired clutch on head gates, locking chain, crabs, gearing and shafts; put in new lifting rod and one new adjusting screw; repaired one short opening cable and cut away corbel to lower cross head.

Lock No. 12, and Level.

Put on four new brass matrixes and one new waling, broken by steamer "Clinton" repaired cross heads, shutting chains, one short opening cable, two crabs and chains. Cut corbel to get straight lead for adjusting screws and cut out two cross heads. Repaired set screws on cannon and one set of gearing.

 DIVISION No. 2.—FROM FOOT OF LOCK No. 13 TO BRIDGE No. 13 (MARLATTS).
Lock No. 13, Bridge No. 9, and Level.

Put on three new brass matrixes and washers, one new extension step and one new opening cable; repaired intermediate gear, three water wheels, two wheel shafts, fenders on head gates, one extension step, two valves and opening cables; put steps and platform to lock house and cellar; screwed up truss rods, and re-set cams of swing bridge.

Lock No. 14, and Level.

Adjusted lock gates, repaired rollers, matrixes, valve, screws, water wheels, two opening cables, two cross heads, two adjusting screws and crabs; put on two new clutches, one new water wheel shaft and two new brass matrixes, four sets gearing overhauled and repaired.

Removed obstruction from under lock gate.

Lock No. 15, and Level.

Repaired rollers, crabs, cables, pinions, water wheels and extension steps; put on three new brass matrixes and washers, two new cables, one new extension step and one adjusting screw; repaired one cross head and 12 sets gearing and put on four brass washers and pinion.

Lock No. 16, and Level.

Repaired six sets gearing, one cross head, two water wheels, one water wheel shaft and three brass matrixes; put on three new clutches and one adjusting screw, and put three brass washers under standard wheel; one corbel cut away for cross head; put on two new crown wheels, one pinion, one new shaft and three new shaft walings.

Lock No. 17, and Level.

Put on six new brass matrixes, one new intermediate gear, one new bridge on head gate, one new clutch post, three new extension steps, one new pinion and one new opening cable, repaired nine sets gearing, one water wheel and shafting, and put two new fenders on wheel shafts; repaired fences on St. David's Road, in numerous places broken by contractors raising the banks of canal, cleaned out St. David's Road Tunnel twice.

Lock No. 18, and Level.

Repaired and put in working order twelve sets gearing, three water wheel valves, and straightening two wheel shafts; cut away corbel for cross head; repaired cross head and put in one adjusting screw; put two new straps from bridge to top of lock gate to keep bridge from rising while the valves are being closed, removed obstruction from under lock gate, put on one new pinion and repaired three opening cables, also put steps and platform to lock house.

Lock No. 19, and Level.

Twelve sets gearing overhauled and put in working order, and two water wheel shafts repaired. Put on two new pinions, one new spur wheel, new intermediate gear, three new steel set screws, two new sets gearing, four new clutches, two new extension steps, two new opening cables, and seven new shaft boxes. Cut away corbels for two cross heads, and drilled out broken set screws. Put steps and platform to lock house, repaired valve gearing on waste weir, also mitre sill and apron of lock.

Lock No. 20, and Level.

Repaired two water wheel shafts, four brass matrixes, one adjusting screw and twelve sets gearing; put on one new pinion, one new corbel and one new valve screw, cut away corbel for adjusting screws. Put new steps and platform to lock house.

Lock No. 21, and Level.

Repaired valve and rods on head gates; took out obstruction from under lock gate, and repaired valve; repaired four sets gearing, one cross head and three brass matrixes; put on two new water wheels, one pinion and two new brass matrixes. Put steps and platform to lock house.

Lock No. 22 and Level.

Repaired twelve sets gearing, five water wheel shaft, one spur wheel one intermediate gear, and four water wheels. Put on two new brass matrixes, one new extension, and one new gear on crab, also put on one new opening cable and repaired two. Repaired and raised four lock gate beds in pond for spare lock gates, repaired plates.

Lock No. 23 and Level.

Repaired nine sets of gearing, ten shaft boxes, one water wheel shaft, one brass matrix, and cut top corbel away to lower cross head, and put on one short binder.

Lock No. 24, Bridge No. 10, and Level

Repaired twelve sets gearing, one valve, two water wheel shafts, one pinion, one adjusting screw and bar also three water wheels. Put on new waling, one new collar, one new pinion, two new opening cables.

Repaired rack at Hoover's Culvert. Put new locking bolt on bridge and spliced bottom chord.

Bridge No. 11 (Railway Bridge).

Repaired floats with new eye-bolts and chains, also repaired fender work, and end of crib. Put drain in bank on west side of canal, dug down 3 feet and filled with broken stone to carry off soakage from foot of Lock No. 24, put new key in rock shaft of locking gear.

Lock No. 25, Bridge No. 12, and Level.

Repaired twelve sets gearing, put on three water wheel shafts and one water wheel.

Took out twelve water wheel shafts, straightened and replaced them. Took off all water wheels repaired and replaced same.

Put on two new brass matrixes four extensions, five new wood shaft boxes, one adjusting screw on four lock gates. Repaired two opening cables and put on two new ones.

Guard Lock.

Repaired roller on turntable of lock gate, also repaired two opening cables and put on one new.

Bridge No. 13, Marlatt's.

Repaired floats with new eye-bolts and plates, also fender work.

DIVISION No. 3—FROM BRIDGE No. 13 (MARLATT'S) TO AQUEDUCT AT WELLAND.

Bridge No. 14. (Allanburgh).

Repaired fenders of bridge and approaches of same with 66 lineal feet, 10 by 12 inch oak waling, renewed bridge fenders, dwelling houses, built new kitchen, and woodshed, 16 by 36 feet, one and one half stories, also new stone vault to W. C. Painted and papered both houses, built new fence, graded and ditched the lot, screwed up truss rods of bridge and put on spliced plates.

Bridge No. 15 (Port Robinson).

Repaired floats, one bridge put new brace in approach of bridge 12 by 12 inch by 40 feet, oak. Put spliced plates and bolts over joints in top chord. Cut one inch off west end of bridge which had been moved bodily with centre pier by steamer "Tilley."

Port Robinson Lock.

In fair order.

Port Robinson Storehouse.

Painted the storehouse.

Port Robinson Ferry.

Repaired sidewalk and floats at ferry.

CUSTOMS AND COLLECTOR'S OFFICE.—*Port Robinson.*

Built new side walk.

Bridge No. 16 (Quaker Road).

Put spliced plates and bolts over joints in top chord, and put in new truss rods.

Banks, Ditches, &c.

Cleaned out ditches and repaired banks throughout the divisions. Cleaned out stone road ditch three times. Built new stone culvert, and covered same with flag stone on Hurricane Road, also rebuilt stone cow-pass, and built bridge over same.

Put in new snubbing posts near Welland. Removed old bridge and built new stone culvert south of Bridge No. 16, west side of the canal, and covered same with flag-stone.

Built new stone abutments, and bridge north of Bridge No. 16, west side of the canal.

Repaired Burgas Creek bridge, north of Welland, west side of the canal.

Painted boathouse at Port Robinson, also caulked tool and workmen's boats, Nos. 1 and 2.

Filled up hole and widened road approach in front of Mrs. Jordan's property, Port Robinson. Cleaned out, widened and deepened ditch along Mrs. Marr's farm, east side of canal, 1,978 feet long.

Built new fence along mill race, Port Robinson, 336 feet long.

DIVISION No. 4—FROM AQUEDUCT, WELLAND, TO PORT COLBORNE HARBOR.

Welland Lock.

Repaired crab. Built stone foundation under lock house. Removed old lock gates from new aqueduct and brought them to gate yard Lock No. 22, old canal, for renovation and to replace others worn out.

Bridge No. 17 (Welland).

Put spliced plates and bolts over joints in top chord.

Bridge No. 19 (Junction).

Put spliced plates and bolts over joints in top chord.

Air Line Ferry (Humberstone).

Float bridge placed across canal for winter use, removed in spring and put away.

Bridge No. 21 (Humberstone).

Bridge replanked. Put spliced plates and bolts over joints in top chords.

Floats (Rock Cut).

Floats removed out of contractors way numerous times, and repaired same again after each frequent rise of lake and level.

Port Colborne, Lock and Bridge.

Repaired vessel gauge, put new lock on bridge and spliced plates and bolts over joints in top chord.

Harbor, Port Colborne.

Built new Tay Dock, 350 feet long and 24 feet 6 inches wide, boated stone and filled behind new Tay Dock, also boated, delivered and levelled stone along slopes in harbor.

Boated stone and lengthened breakwater and repaired floats in harbor.

Built two protection fences alongside of pier to prevent sand blowing into harbor, 200 feet long and 6 feet high.

Overseers and Lock Tenders' Dwellings, &c.,

Built 67 feet picket fence and 181 feet board fence and gate around lock tenders' dwellings, also planted sundry trees; repaired lock tenders' dwellings, and put culvert and drain under public road.

Custom and Toll Collector's Office.

Built new toll collector's and customs office opposite lock, with all proper fittings and accommodations, and removed old office fixtures into new. Fitted building with hot air furnace and gas pipes.

Built 235 feet picket fence with gate and 44 feet board fence with double gate; planted trees, levelled up grounds, built a new sidewalk and water closet, painted office, &c.

Back Ditches, Culverts, Banks &c.

Cleaned out back ditch south of Welland, east side of canal, cleaned out and repaired back ditch south of Lyon's Creek culvert, west side of canal. Cleaned out back ditches, west side of canal, south of Welland, and filled up holes; length of back ditches cleaned out 5 miles, made new ditch 800 feet long, west side of canal, between Welland and Junction; repaired banks of canal throughout whole length of division.

OLD WELLAND CANAL.
DETAILS OF REPAIRS AND MAINTENANCE OF THE WORKS OF THE OLD WELLAND CANAL.*Lock No. 1, Bridge and Level.*

Three crabs and chains repaired and one new spindle put in; three new snubbing posts put in and painted. Floats repaired and replanked. The long floats thoroughly repaired after the winter while the water was drawn out of the canal. The swing

bridge was raised and pivot repaired. New plank and sheet piles put in, braces straightened up and other repairs. New hinges put on trap door of draw bridge also new plank and stringers. Diver repaired valves in lock gates and toe roller, took plate out of roller frame and repaired one sheave.

Lock No. 2, Bridge and Level.

Repaired and raised ballast box of bridge, put in $4\frac{3}{4}$ inch truss rods under centre of box outside of bridge. Rebuilt crib work of bridge at ship yard from below water line to proper height to receive bridge. Built thereon a double truss bridge, size 57 by 12 feet, 5 stringers, 6 by 12 inches, covered with 3-inch pine; built two pontoons and secured bridge to same. Reduced height of rollers under bridge at Lock No. 2, and adjusted rods. Repaired railing on head gates broken by schooner "Jessie McDonald." Put three new joists in heel end of bridge. Repaired apron of floats below lock. Put new cable on foot gate and repaired broken lock cable. Repaired track under foot gate. Put new iron head blocks on all 4 lock gates to replace oak ones. Raised bridge at Welland Vale Works, also raised socket of same, and lowered bridge to place; laid new 3 inch oak plank on toe approach. Put new sill down for railing on upper side at heel of bridge. Raised all four gates at lock on toe and screwed up suspension bars. Built new kitchen at lock tender's house, 12 by 14 feet, 7 feet 6 inches ceiling, balloon frame outside and inside sheeted, matched floor and hung one sash door between old building and kitchen, fitted and hung outside doors on kitchen, shingled roof of kitchen, also roof of kitchen adjoining house; painted all new work 3 coats, put new covers on cisterns of both houses, brick lined both cisterns. Raised kitchen of adjoining house and put stone foundation under. Put new eavetrough and conductors on same; repaired broken plaster with V sheeting. Repaired and replanked approach Lock No. 2 bridge. Raised and repaired towing paths with stone facing and put in six new snubbing posts.

St. Paul Street Bridge (St. Catharines).

Repaired fender work of bridge. Built new stairway. Put $2\frac{3}{4}$ inch rods through a 2 by 2 inch iron cross head from behind gearing of bridge to needle beam to hold gearing in place. Replanked bridge, and put new stringers on lower side. Tightened truss and stay rods.

Lock No. 3, and Level.

Built new kitchen at locktender's house, size 12 by 14 feet, posts 7 feet high, rough sheeting and battens. Matched floor and shingled roof. Put new shutting gear on all four lock gates and put new timbers under and reset crabs; replaced chains with wire cables, cut off beams and rounded ends of same. Shifted foot board irons and made platforms at both sides of crabs, reduced width of slash boards on waste weir and put two new rods in weir and repaired old ones. Took old collar off foot lock gate and replaced with new one, also took off broken anchor on same gate and repaired and replaced. Repaired apron at foot of waste weir and covered plank with 4 by $\frac{1}{2}$ inch iron straps to prevent ice from cutting same. Put in thorough order apron and foot of Lock No. 3; took off old planking and took out old sheet piling, removed three long broken cross sills and replaced them with extra large new oak timber across between lock walls. Drove two rows of square piles across between the wing walls of lock and bolted them to timbers, and filled up vacancies with concrete and replanked throughout. Pointed up the wing walls of lock.

Canal Office, &c.

Fitted outside sash on all the windows of the first storey and 6 windows in basement, made and hung one pair of inside swinging doors for hall of office, made extensive repairs to barn, put new sills under the whole building, new joists in first floor, new floor in first storey, put in 5 new posts and spliced 2 old ones, also new studding, girts and sheeting where required. Built an addition on front of barn, 9 feet

by the width and height of building, made four new window frames, repaired old ones, made three new windows, one new door and frame, and one batten door, repaired old ones. Put frame for sliding doors in front end of barn and hung doors. Fitted, glazed and painted sash. Covered roof with metallic shingles and put on new galvanized iron trough and water pipes, made box drain, 10 inches by 14 inches by 20 feet for front of barn. Dug out foundation and put stone wall under sills of barn.

Lock No. 4, Bridge and Level.

Rebuilt bridge between floats, put in four new stringers, built new apron on floats and covered bridge and apron with 3-inch pine. Repaired bridge leading from heel-path to Thorold road, put in 5 new 6-inch by 12-inch stringers and covered with 3-inch pine, also put in 18 new posts under railing and put angle irons on four end posts. Repaired bridge on heel-path above gas works, put in 5 new stringers, 6-inch by 12-inch, covered with 3-inch pine, size of bridge 14 feet by 12 feet. Put new foot boards on head gates of lock and repaired lock of bridge. Put new shutting gear on head lock gates, also new timber under and re-set crab. Swing bridge replanked and tightened bolts in head castings of lock gates and put in new ones. Shifted foot board irons.

Lock No. 5, Bridge and Level.

Raised bridge on pivot and adjusted rods of same, put 21½-inch bolts through balance beam, took bands off beam. Put new stop bolt in bridge. Repaired apron of waste weir. Put new timber under and re-set crabs at lock gates. Put new slash boards on waste weir.

Lock No. 6, and Level.

Put 2 by 1½ inch bolts through balance beam. Took out guide rods, repaired and replaced them. Put new through eye-bolts in head lock gate. Put new pine beam on foot lock gate, also new timber under and reset crab. Put new slash boards on waste weir, repaired apron of same and put four new gates in waste weir.

Gate Yards and Shop (St. Catharines).

Built two new lock gates for foot of Lock No. 3 launched, painted, and laid them in pond at gate yard. Repaired 27 wheelbarrows, made sundry patterns, seventy white ash handles for ice chisels, prepared sheeting for inside of hydraulic aqueduct. Repaired bridge on heel path side below yard, put in four new stringers, 6 by 8 inches by 12 inches by 35 feet long, covered them with 2-inch pine. Prepared a sill of planking for St. Paul Street Bridge, spliced cables for lifting scow, made box drain 10 by 14 inches by 20 feet for tow path below St. Paul Street Bridge, made six new wheelbarrows, and commenced repairing and rebuilding sundry lock gates hauled out last season.

Lock No. 7, Bridge and Level.

Raised bridge on pivot, put new planking on coping, also five new joists in toe of bridge, replanked same and repaired heel approach of bridge. Repaired apron of waste weir and put in four new gates, also put in two snubbing posts.

Hydraulic Race.

Changed washers on bolts in aqueduct, replaced them with 6 by 6 square. Caulked and paved seams where they showed leaks, sheeted inside and bottom of aqueduct with dressed and jointed inch lumber. Repaired bridge across race on Thorold Road. Took up plank lower side of Street Railway track and put 3-inch pine on top of stringers and relaid plank. Repaired and replanked bridge over chute between Nos. 2 and 3 Raceways. Put new rack across head of raceway at Lock No. 11. Repaired fences, also repaired and protected banks of raceway with stone facing. Repaired and extended dry stone walls. Kept the raceway clear of ice winter and spring, night, day and Sundays.

Lock No. 8, and Level.

Repaired apron of waste weir, put on iron bars to prevent ice from cutting the apron and put in four new gates in waste weir.

Lock No. 9, and Level.

Raised foot lock gates and put new brasses under them. Built new foot bridge across head of lock for winter use, size 28 feet by 4 feet, covered with 2 inch pine, with hand rail on both sides. Repaired apron of waste weir and put iron straps on same for protection against ice, also put four new gates in weir. Tore out old bridge across channel above waste weir and dug out for and built dry stone wall foundation, and built new bridge across waste weir, 114 feet by 12 feet, five stringers 6 by 8 inches by 12 feet, bolted at joints, covered with 3-inch pine railing on both sides 6 by 6 posts and rail dressed. Painted railing three coats, made and put in box drain, 10 inches by 14 inches and 28 feet, under roadway to bridge. Put in two snubbing posts.

Lock No. 10, and Level.

Replanked bridge across waste weir, put on new slash board, new rod, and repaired and replaced old ones; also refitted rollers and reset them. Took out head lock gate, heel path side, turned it up and took off old planking, replanked with new, and put gate in place again. Put new shutting gear on both head gates; put new timbers under and reset crab at both head gates. Built a rough house 6 by 8-7 feet high for shelter for lock tender. Put new foot boards on head gates. Drew the level down and put in one new gate in waste weir in place of one carried out by pressure of water. Put new crab at head lock gate tow path side. Repaired apron of waste weir and put in three new gates in waste weir. Put in five snubbing posts.

Lock No. 11, and Level.

Rebuilt bridge across hydraulic raceway at spoke factory; put new sill on stone work; four new stringers, covered them with three inch pine. Rebuilt fence at end of bridge, and replaced gates. Put new slash boards and repaired rods of waste weir, repaired apron of waste weir, put on new iron straps and four new gates put in; stopped leak in bank of waste weir. Repaired and raised tow path and put in two snubbing posts.

Lock No. 12, and Level.

Took out one pair old lock gates and put in one pair new ones, and put in two snubbing posts.

Lock No. 13, and Level.

Took off broken anchor on foot gate, heel path side, repaired and replaced same, and put in three snubbing posts.

Lock No. 14, and Level.

Put new window sash and glass in lock tender's house. Built new timber bridge on roadway across waste weir. Took out one old lock gate and put in one new, reset two crabs and put new platforms under, stopped leak in bank of waste weir and put in four snubbing posts.

Lock No. 15, Bridge and Level.

Put new window sash and glass in lock tender's house and new slash boards on waste weir. Put down new crab foundation and one new collar in lock gate. Repaired break in bank of waste weir and put in four snubbing posts.

Lock No. 16, and Level.

Put new window sash and glass in lock tender's house, built new storm house and painted same. Put down new crab foundations and took out one pair old lock

gates and put new pair in place; the old gates taken to gate yard, Lock No. 21. Set one pair crabs and platform, stopped leak in bank of waste weir and put in four snubbing posts.

Lock No. 17, and Level.

Put new window sash and glass in lock tender's house, built new storm house and painted same. Repaired leak in bank of waste weir.

Lock No. 18, and Level.

Put new window sash and glass in lock tender's house, and built new storm house and painted same. Repaired break in bank of waste weir, also repaired cellar of lock tender's house.

Lock No. 19, and Level.

Put new window sash and glass in lock tender's house and built new storm house and painted same.

Lock No. 20, and Level.

In good order.

Lock No. 21, and Level.

Built 120 feet of board fence around lock-tender's house. Filled thirteen cords stone under waste weir apron; washed out and put down new apron afterwards. Took out one pair old lock gates and hung one pair new ones; dispensed with balance beams.

Gate Yard and Shop, Thorold.

Repaired crane scow "Hercules" with new streak, 20 feet, also repaired machinery and put in new shaft. Rebuilt six wheelbarrows, also rebuilt one pair lock gates for the following locks, viz., Nos. 12, 14, 16 and Allanburgh.

Built new pile driver and put same on crane scow "Hercules," with 2,500 pound hammer.

Filled up derrick scow "Alexander;" caulked and painted same. Caulked and painted tool and workman's boats for Division Nos. 3 and 4, new canal. Painted decks of crane scow "Hercules." Brought six pair old gates from Locks Nos. 12, 14, 16 and Allanburgh; hauled them out on marine railway to be rebuilt.

Rebuilt three pair old lock gates, and built new ferry boat for Port Colborne Ferry.

Levelled up and underpinned marine railway.

Lock No. 22, and Level, and Keefer Bridge.

Put new crab on lock. Laid 12 lineal feet new floor on Keefer swing bridge.

Lock No. 23, and Level.

Built new wood shed in rear of lock tender's dwelling, 12 feet by 16 feet, 8 feet high.

Repaired leak in bank of waste weir.

Lock No. 24, Bridge and Level.

Replanked swing bridge. Built new side-walk 6 feet by 40 feet. Took up side-walk and repaired with stone and cement the leak in lock in front of Coulons and Cloy's houses. Put new concrete floor in cellar of Coulon's house and repaired cement floor in Cloy's house, cellar damaged by leakage from canal. Built new abutments south side of slope at Welland Mills, 12 feet by 16 feet by 8 feet, and filled it with stone and earth. Repaired leak in bank of waste weir.

Lock No. 25, and Level.

Built new foot bridge across head of lock. Removed obstructions out of waste weir, also removed a lot of sunken timber obstruction from and repaired long rack above lock. Repaired leak in bank of waste weir and faced bank of mill race at Lawson's Mill with stone, 500 feet in length.

Guard Lock.

Raised lock gates and put in new brasses, one new collar and cravat.

Hurst's Swing Bridge.

Built new temporary bridge across canal, 100 feet by 12 feet. Built new stone abutment 16 feet by 16 feet by 17 feet and erected new swing bridge. Made new approaches at each end roadway, 60 feet long, and macadamized also new approach on canal, east side, 200 feet long, both waled and braced. Repaired approaches, west side, with 60 feet timber, and stone filling floor of bridge, 85 feet by 12 feet.

Marlatt's Swing Bridge.

In good order.

Allanburgh Swing Bridge.

Put new stone foundations under bridge tenders house, also 2 new storm houses over doors, rebuilt kitchen and wood-shed, and new blinds all around dwelling, and new floor on verandah.

Allanburgh Lift Lock.

Took out one pair old lock gates and hung one pair new ones.

Put down new platform and re-set two crabs.

Put in dam at foot of lock, and cleaned out lock bottom and removed dam afterwards. Cleaned out ditches and filled up holes about lock.

Allanburgh Guard Lock and Bridge.

Repaired swing bridge, caulked old canal supply race valves with straw and manure to admit of repairs to lower part of canal. Repaired supply race by filling with stone behind walls, and remove caulking, &c.

Three Mile Level to Junction with new canal.

Repaired leak in Higgin's waste weir.

Guard Lock.

Two new head gates were built, and put in Guard Lock at Dunnville, and the old gates drawn out at foot of lock and cut up, the old irons taken off and put up in new gates. The old chains taken off and replaced with new ones.

Swing Bridges.

The Marshville and Stromness swing bridges received new stringers and needle beams, and new top covering. The toe approaches received new sleepers and were replarked. All the swing bridges have been raised on their pivots, and properly balanced, and track levelled when disturbed by frost. The slopes and approaches to all swing bridges have been filled with clay and covered with gravel and stone when washed out.

Lock and Bridge Houses.

All the lock houses and bridge shanties have been repaired and painted, and the locks and bridges supplied with tamarack poles and timber lifters.

Locks.

The mitre sills of Dunnville, Port Maitland and Junction Locks have been cleaned out and all sediments and accumulations behind the gates taken out, and the sheeting on the back of the gates repaired. The old arm and frame of the lock opener on west side of head gates on Port Maitland lock has been renewed.

FEEDER CANAL.

FROM FEEDER JUNCTION TO DUNNVILLE AND PORT MAITLAND—23 MILES.

From Dunnville to Stromness and Port Maitland, distance $6\frac{1}{2}$ miles, there are 2 locks, 4 swing bridges, 3 waste weir, with 36 stop gates, bridge 600 feet long by 18 feet wide, 1 apron below dams 640 feet long, 2 piers 10 by 18 by 15 feet, 26 flood gates, 1 tool house, 1,000 feet boom timber in Grand River above dam to prevent drift wood and rubbish from entering waste weir, 1,785 feet embankment, 8 head gates at entrance of mill ponds, 12 stationary bridges with an aggregate length of 1,800 feet, 2 lock-tender's houses, 1 overseer's house and office, 1 repair scow, 3 punts, 1 pile driver, 2 piers, and harbor with a depth of water from Lake Erie to outlet of canal of 19 feet, and to lock an average of 9 feet at low water mark. From Stromness to Bolton Ditch, Marshville and Junction, $16\frac{1}{2}$ miles, 1 lock, 3 swing bridges, 2 stationary bridges, 1 sluiceway, 3 culverts and 2 back ditches.

The supply of water has not been nearly so good as during the previous year, as a consequence the mills on this division were confined to two days per week during the month of August and three days per week during the month of September, after which month the mills ran full time. There has been but one accident during the year, caused by a small pleasure yacht running into the swing bridge at the Bolton Ditch, and knocked the bridge off the pivot, but no serious damage. All sunken logs and other obstructions have been removed out of Feeder Channel, rubbish and brush carried down the drains and ditches into the culverts have been taken out, piled up and burnt. Driftwood and rubbish carried down the Grand River by the spring freshets and lodging in the guard lock, were taken out, drawn away and burnt.

Waste Weir.

Logs, stumps and roots of every description, which had accumulated in front of the waste weir gates and valves, were taken out and dumped below the weirs, and thus carried by the current into the river lake. The screws of the upper waste weir have all been carefully cleaned, the valves were taken off, straightened and replaced.

Dam, Apron and Stationary Bridges.

Flood gates on the dam repaired, and 400 feet of the apron above the dam has been covered with stone brought from Port Colborne by scows. The old decayed sleepers underlying the top covering of the stationary bridges has been taken out and replaced with new, and all worn out and broken plank taken out and replaced with new.

Float Bridge.

The float bridge at Petit Road was replanked, hinges repaired and chain renewed.

Canal Banks.

Towpaths repaired throughout, and faced with stone where urgently needed.

GENERALLY.

All the gearing connected with the lock gates, waste weirs, bridges, &c., and machinery, have been renewed when necessary and kept in good order throughout.

All thistles and weeds have been cut as usual on Government property, and ditches and culverts everywhere cleaned out, and deepened where necessary.
All bridges blocked up for winter use.

I have the honor to be, Sir,

Your obedient servant,

WILLIAM ELLIS.

A. P. BRADLEY, Esq.,

Secretary Department of Railways and Canals.

FINES AND DAMAGES.

I have collected during the fiscal year from masters and owners of vessels the sum of \$10 in fines for violation of canal regulations, and the sum of \$297 for damages to the works, making a total of \$307, which amount has been handed to H. H. Collier, Esq., Collector for the Port of St. Catharines, and I append a statement in detail herewith marked "A."

I also append statements marked "B" and "C," showing the greatest and lowest depth of water on the mitre sills at Port Dalhousie and Port Colborne Locks (new and old) in each month during the fiscal year ending 30th June, 1888; also a comparative statement of the average for the month of June, 1887, and 1888, which shows the water has been 73 inches lower at Port Dalhousie and 1 foot $\frac{1}{2}$ inch lower at Port Colborne (new locks) and Port Dalhousie old lock 1 foot $10\frac{1}{2}$ inches lower and Port Colborne old lock 1 foot $2\frac{1}{2}$ inches higher than for the same month in the year 1887.

"A."

STATEMENT of Fines and Damages collected from Vessels controverting Canal Regulations for the Fiscal Year ending 30th June, 1888

Date.	Name of Vessel.	Fines.	Damages.	Total.
		\$ cts.	\$ cts.	\$ cts.
1887.				
July 10.....	Tug "Mitchell.".....	5 00		
do 18.....	Scow "Sir Charles.".....	5 00		
Sept. 23.....	Schooner "Jessie McDonald.".....		10 00	
Nov. 14.....	Steamer "Tecumseh.".....		167 00	
do 27.....	Schooner "Emerald.".....		50 00	
1888.				
May 31.....	Steamer "Rhode Emily."..... (This boat did not pass through again until 14th May, 1888.)		70 00	
		10 00	297 00	307 00

Handed to H. H. Collier, Esq., Collector, St. Catharines.

" B. "

STATEMENT showing the Depth of Water on the Lower Mitre Sill of New Lock No. 1 Welland Canal, at Port Dalhousie, for the Fiscal Year ended 30th June, 1888.

Months.	Lower Sill.		Months.	Lower Sill.	
	Highest.	Lowest.		Highest.	Lowest.
1887.	ft. in.	ft. in.	1888.	ft. in.	ft. in.
July.....	17 9	17 5	January.....	15 7	15 1
August.....	17 9	16 9	February.....	15 4	15 0
September.....	17 0	16 4	March.....	15 8	15 0
October.....	16 5	16 0	April.....	16 2	15 5
November.....	16 2	15 5	May.....	16 4	15 11
December.....	15 8	15 5	June.....	16 4	15 11
			ft. in.		
			Average, June, 1887..... 17 10		
			do 1888..... 16 2½		

STATEMENT showing the Depth of Water on the Upper Mitre Sill of New Lock, Welland Canal, at Port Colborne, for the Fiscal Year ended 30th June, 1888.

Months.	Upper Sill.		Months.	Upper Sill.	
	Highest.	Lowest.		Highest.	Lowest.
1887.	ft. in.	ft. in.	1888.	ft. in.	ft. in.
July.....	16 11	15 10	January.....	15 9	14 2
August.....	16 4	15 5	February.....	15 0	14 0
September.....	16 9	14 11	March.....	16 1	13 10
October.....	18 8	14 5	April.....	15 8	14 3
November.....	16 2	14 5	May.....	15 11	14 10
December.....	17 5	14 2	June.....	16 3	14 3
			ft. in.		
			Average, June, 1887..... 16 6		
			do 1888..... 15 5½		

"C."

STATEMENT showing the Depth of Water on the Lower Mitre Sill of Old Lock No. 1, Welland Canal, at Port Dalhousie, for the Fiscal Year ending 30th June, 1888.

Months.	Lower Sill.		Months.	Lower Sill.	
	Highest.	Lowest.		Highest.	Lowest.
1887.	ft. in.	ft. in.	1888.	ft. in.	ft. in.
July.....	15 1	14 7	January.....	12 8	12 3
August.....	14 10	13 11	February.....	12 6	12 1
September.....	14 1	13 5	March.....	12 10	12 3
October.....	13 6	13 0	April.....	13 4	12 7
November.....	13 1	12 7	May.....	13 5	13 0
December.....	12 10	12 6	June.....	13 4	13 1
				ft. in.	
Average, June, 1887.....				15 2	
do.....				13 3½	

STATEMENT showing the Depth of Water on the Upper Mitre Sill of Old Lock No. 27, Welland Canal, at Port Colborne, for the Fiscal Year ending 30th June, 1888.

Months.	Upper Sill.		Months.	Upper Sill.	
	Highest.	Lowest.		Highest.	Lowest.
1887.	ft. in.	ft. in.	1888.	ft. in.	ft. in.
July.....	14 0	13 0	January.....	12 10	11 3
August.....	13 5	12 9	February.....	12 1	11 1
September.....	13 10	12 2	March.....	13 2	10 11
October.....	15 9	11 6	April.....	12 11	11 4
November.....	13 3	11 3	May.....	13 0	11 11
December.....	14 6	11 7	June.....	13 4	11 4
				ft. in.	
Average, June, 1887.....				13 10	
do 1888.....				15 2½	

APPENDIX No. 13.

RIDEAU CANAL.

RIDEAU CANAL OFFICE,

OTTAWA, 8th October, 1888.

SIR,—I have the honor to submit my annual report on the state of the works under my charge for the fiscal year ending 30th June, 1888.

Navigation closed at Ottawa and Kingston Mills 25th November, 1887.

Opened in 1888 at Ottawa and Kingston Mills 3rd May.

The water, in the descending reaches from the summit level (Upper Rideau Lake), was maintained so as to give full navigation depth on the sills of the different locks until the close of navigation.

On the descending reaches from the summit level, towards Kingston, the water fell in the first week of September below the height required for navigation on the sill of the upper lock at Newboro', as fixed by the ordnance standard to be 5 feet 10 inches, and continued falling until the close of navigation when there was only 4 feet 6 inches on the sill.

On the Kingston Mills' reach the water at the opening of navigation stood 6 feet 6 inches on the sill of the upper locks at Kingston Mills, but fell below 5 feet 10 inches, the ordnance standard height for navigation, on the 8th August, and continued falling until the close of navigation when there was only 4 feet 1 inch of water on the upper sill. The spring freshets in the Rideau River amounted to almost nothing, owing to the gradual melting of the snow together with the cool nights.

At the Kingston end the snow fall was light and we were not able to get our usual reserve of water in Mud, Openicon, Sand and Cranberry Lakes, for which we have now to depend upon to supply the Kingston Mills level.

The reserves formerly held back by dams on the Rock, Buck and Devil Lake systems, having been abandoned by their owners, are no longer available, and the surplus water is now delivered into the navigation during the spring freshets when not required.

The sites of the dam controlling the Rock Lake system has been acquired, and it is contemplated to rebuild this winter. There has also been correspondence with Mr. Chaffey for the purchase of the sites of the dams controlling the Buck Lake system.

Owing to the general lowness of water prevailing through the canal this summer, arising from the continued drought, complaints are made by the forwarders of the accumulation of gravel and clay in the several cuts, and at the foot of the water locks. Our present appliances are insufficient to remove them, and the best we can now do is by the tedious and expensive process of making a channel by a diver and assistant. A dredge suitable for the canal should be procured without delay and kept at work deepening the cuts and removing the numerous shoals which have gradually accumulated since the canal was built.

The principal repairs to the works at the different stations were as follows:—

Kingston Mills.

Swing bridge repaired, general repairs in lock gates, new chain blocks, and timber delivered for one pair of gates.

Brewer's Lower Mills.

Extension of pier and renewal of wharf, gravel on dam, and sundry repairs to station.

Brewer's Upper Mills.

One pair of new swing beams, four new chain blocks, one pair of gates repaired.

Morton's Dam.

Repairs to dam.

Jones' Falls.

One new swing beam, new chain blocks, and repairs to retaining wall.

Davis's.

Four new chain blocks and sundry repairs to gates, new house for lock laborer.

Chaffey.

One pair of swing beams and general repairs.

Newboro'.

Rebuilt high bridge 80 feet span, and rebuilt west stone abutment, repaired and grouted abutment, east side.

Narrows.

Repairs to lockmaster's house, and general repairs to lock.

Poonamalie.

Timber delivered for lock gates.

Smith's Falls (detached).

One pair of lock gates renewed, one swing beam on upper gate, and new chain blocks.

Smith's Falls (combined).

One pair of new lock gates, and general repairs to station.

Old Slys.

General repairs to station, timber delivered for two pairs of lock gates.

Edmond's Rapids.

General repairs, and repairs to embankment.

Kilmarnock.

Repairs to bulkhead.

Merrickville.

Renewed one pair of lock gates, long dam renewed, and repairs to masonry in upper and lower basin. Timber on hand for two pairs of lock gates.

Clowe's Quarry.

Rebuilt wing wall of lock, repairs to stone dam, one new swing beam, and new chain blocks.

Nicholson's Rapids.

Bulk-head renewed, repairs to lower gates, timber delivered for one pair of gates.

Burritt's Rapids.

Renewed long dam.

Beckett's Landing.

Renewed long bridge.

Lorne Bridge.

Replanked.

Manotick.

Renewed main bulk-head, repaired boom at head of island.

Long Island.

General repairs to locks, stone cut and delivered for new sill and coping stones for lock.

Black Rapids.

Built wooden apron to strengthen long flat dam, filled with stone and sheeted with nine inch timber.

Repaired three piers and filled the same with stone, sheeted top of dam with two inch plank, and placed 600 yards of clay behind the same.

Hogsback.

Gravel delivered on dam and small repairs to station.

Hartwell's.

Small repairs to station and one swing beam.

Little's Bridge.

Timber delivered for new swing bridge.

Ottawa.

One pair of lock gates, No. 3, 2 pairs of sluice frames, 10 chain blocks, repairs to No. 2 lock gate, repairs to wharf round basin.

Works done for which Special Appropriations were made.

Wharf extension at Ottawa towards Maria Street Bridge, 200 feet was built and completed according to contract.

New bridge over the Rideau River at Manotick, built and completed according to contract.

New iron swing bridge, with approaches and crib wharfing over the head lock at Smith's Falls, was completed, with the exception of the swing, fencing, side walls, &c., which, it is expected, will be ready for traffic this fall.

Navigation was maintained without any break or stoppage, save the low water at Newboro and Kingston Mills, on which account some of the boats had to lighter up.

There was considerable increase of traffic through the canal.

I have the honor to be, Sir,

Your obedient servant.

F. A. WISE,

Superintending Engineer.

A. P. BRADLEY, Esq.,
Secretary Department of Railways and Canals,
Ottawa.

APPENDIX No. 14.

TAY CANAL.

RIDEAU CANAL OFFICE,**OTTAWA, 8th October, 1888.****REPORT OF PROGRESS FOR THE YEAR ENDING 30TH JUNE, 1888.**

The contractors for the Tay Canal from Craig Street to Beveridge's Bay completed their contract in September last, and moved their dredges out of the canal.

A contract was entered into with Messrs. Davis & Co., this spring, to complete the canal from Craig Street to the Old Basin at Perth.

In the spring we raised the water in the canal to nearly the proposed navigation height, and allowed excursion steamers to run at their own risk from Perth to the Rideau navigation, which was taken advantage of, and boats drawing 5 feet passed through to the lake.

As soon as the contractors commenced work on the extension, the water was lowered to enable them to work to the best possible advantage.

I have the honor to be, Sir,

Your obedient servant,

FRED. A. WISE,

Superintending Engineer.

A. P. BRADLEY, Esq.,

Secretary Department of Railways and Canals.

Ottawa.

APPENDIX No. 15.

TRENT CANAL.

ENGINEER'S OFFICE,

PETERBOROUGH, 31st July, 1888.

SIR,—I have the honor to submit the annual report on the works under my charge for the fiscal year ending 30th June, 1888.

Navigation on the different stretches closed about the 25th of November and opened again on the 20th of April.

Notwithstanding the very dry weather of last season the water was maintained at a fair height. While on the question of water supply I might mention that there need never be any scarcity of water on these works, in fact a supply of water equal in volume to the average June flow could be had, if the upper reservoir were managed in the interests of navigation instead of only in the interests of lumbermen and the reservoirs maintained in a good state of repair. Soon the lumbering operations will be over and then these reservoirs used by them can be utilized in the interests of navigation. In connection with this I might state that last fall one lumberman built on his limits no less than nineteen dams, and many of these being quite extensive works—one dam being over 40 feet in height and 200 feet long, and damming the water back for miles over barren tracts of land.

The following works recently constructed by the Department of Railways and Canals were handed over to my charge on 3rd May, and navigation commenced on the completion of the swing bridges, viz.:

At Fenelon Falls, lock, canal and swing bridge.

At Buckhorn, lock, canal and swing bridge.

At Lovesick, lock and dams.

At Burleigh, lock, swing bridge and dams.

At Young's Point, a dam.

At Lakefield, a dam.

There has been considerable traffic already through the locks at Buckhorn, Lovesick and Burleigh, and this will increase when the obstructions are removed and the channels buoyed. This work is about to be commenced.

During the past year three new steamboats have been placed on the waters from Lakefield to Balsam Lake. There are now thirteen steamboats on this stretch.

The total number of lockages was 1,140, the greatest number being at Bobcaygeon, viz., 592.

Traffic on the stretch above Lakefield has greatly increased since the lumbermen have been compelled to keep a separate channel through Katchewanoe Lake.

Navigation was uninterrupted except for a short time near the close of the season when the water was drawn off from Pigeon and Buckhorn Lakes to facilitate the works of repair at the Buckhorn dam.

The works at the different stations between Treuton and Balsam Lake together with the repairs executed are as follows:—

Roseale.

At this station there is a lock and dam under the control of the Government of Ontario.

Fenelon Falls.

The works here consist of a canal, lock (double lift) and swinging bridge, recently constructed by the Department of Railways and Canals.

Lindsay.

The works here are a dam and lock, the latter being under the control of the Government of Ontario. The dam is in good condition.

Scugog River.

The snags were removed from the river, a light was kept on the beacon at the mouth of the river last season.

Bobcaygeon.

The work here consists of a canal, lock and two dams, a number of new braces were placed on the lower side of the dam and the dam gravelled, an appropriation has been made for a new dam which is greatly needed. An appropriation was made last year to re floor the lock chamber with plank. Upon further observations with the aid of a diver I found that the proposed repairs would be inadequate so I deemed it better to postpone this work till a larger appropriation for a more permanent work was obtained. This work will be proceeded with at the close of navigation. The work on the lower gates was deferred till the work of flooring is being done.

Buckhorn.

At this station there is a canal, lock, swing bridge, flat dam and sluiceways. A short swing dam on the south side about 80 feet long, was in such a condition that some immediate steps were necessary to be taken in order to prevent its going out control of the water during the spring freshet as was noticeable during the past spring during the spring freshets. Part of the appropriation for the Indian River dam was taken for this purpose and two new sluiceways were constructed and the old mud dam removed. This has been a great improvement and has given a much greater control of the water during the spring freshet as was noticeable during the past spring when the water only reached a point at 27 inches on the cap of the dam, which is some 18 inches lower than the ordinary spring freshet mark.

Lovesick.

The works here are three stop log dams and a dock recently constructed.

Burleigh.

The works here consist of two stop log dams, a flat dam, a double lift lock and a swing bridge, all recently constructed.

Indian River.

Two small piers were placed in the "cut" at the outlet of the Stoney Lake into the Indian River leaving a sluiceway seven feet in width (provided with stop logs) between them. This dam was built in such a manner as to alter the escape of this river in the spring as little as possible. A head of two feet and a-half above zero can be held in Stoney Lake by means of this dam.

Young's Point.

A lock and swing bridge are situate here, which are under the control of the Government of Ontario, also a stop log dam recently constructed by the Department of Railways and Canals.

Lakefield.

At this point there is a stop-log dam recently constructed.

Whitlaw's Rapids.

The works here are a lock stop log dam and a flat dam. Part of the lower apron of the flat dam which was removed by the ice, was replaced, and a number of the lower braces were removed. The sawdust at this point is a great nuisance, in fact many mornings it is almost impossible to open the gates at all, and the great strain necessary to open them is telling on the gates.

Otonabee River.

Works of removing obstructions at the following shoals, viz., Yankee Bonnet and Robinson's Island, was proceeded with and a fair channel was made. At the mouth of the river at Rice Lake the sawdust has completely closed two of the three channels by which this river enters Rice Lake, and is fast closing the remaining channel. An appropriation was made last year for the removal of this sawdust, but as the lumbermen continued throwing it into the river, I deemed it advisable to apply this appropriation to some more useful purpose.

Hastings.

The works here consist of a lock, swing bridge and flat dam. Part of the lower apron of the dam, together with the foundation timbers, were carried away during the spring freshets. Upon drawing off the water, it was found that the foundation under the lower apron in the remainder of the dam was in such a condition as to be liable to go out at any time. A favorable opportunity was offered by the water being drawn off to repair it, so I put a new foundation under the lower apron for the whole length of the dam. This dam is now in good condition.

Boulders were removed and a fair channel made at the bar about two miles below Hastings, and also at a point about a mile further down. These channels have a depth of 5 feet and a width of 30 feet. They require to be still widened to 50 feet and buoyed.

Heely Falls.

There is a dam at this station which creates navigation up to Hastings, a distance of sixteen miles. The season was so unfavorable for work at this dam that the work for which there was an appropriation was postponed.

Chisholm's Rapids.

The works here are a canal about half a mile in length, a lock and a flat dam. The locks are in working order, but cannot be used on account of the fixed bridges belonging to the county and the Central Ontario Railway. If these were replaced by swing bridges, a stretch of navigation, twenty-five miles in length, would be available.

I have the honor to be, Sir,

Your obedient servant,

RICHARD B. ROGERS,

Superintending Engineer.

A. P. BRADLEY, Esq.,

Secretary, Department of Railways and Canals,

Ottawa.

 APPENDIX No. 16.

 TRENT RIVER NAVIGATION.

SUPERINTENDING ENGINEER'S OFFICE,

OTTAWA, 14th August, 1888.

SIR,—I have herewith the honor to submit a report upon the various works which have been done in connection with the navigation of the Trent River (one of five feet depth on the sills of the canal locks) during the past year, between the village of Lakefield, nine miles above the town of Peterboro', and its summit level, or Balsam Lake.

Beginning with Lakefield, and taking each work in the order it comes, they are classified as follows:—

Lakefield.

Nothing has been done here except the building of a new regulating dam to control the water of Lake Katchewanoe, and this was completed in the early part of 1887.

Young's Point.

The same remarks apply. Nothing has been done since the erection of a dam to regulate the water of Stone Lake in 1885. There is a lock here to overcome the rapids between Stony Lake and Katchewanoe Lake, with a lift of seven feet.

Burleigh.

The works at this point extend from Stony Lake below them, to Deer Bay Lake above. They also include Lovesick Lake and Rapids, embracing a distance of about two and a quarter miles.

These works consist at Burleigh of two combined locks, a regulating dam across the main river to raise the water to the level of Lovesick Lake and draw out several intermediate rapids, and other smaller dams have also been constructed to control such outlets as Perry's Creek, &c. A swing-bridge has also been placed across the inlet to the upper lock to carry the travel of a colonization road there. This was the last item of work done, and it completed the whole in the month of June last.

At Lovesick, the works consist of a lock, with entrance wharfage at both ends, a regulating dam to control the water in Deer Bay, and a timber slide.

The locks at Burleigh have a lift of $25\frac{1}{2}$ feet and the one at Lovesick $3\frac{1}{2}$ feet; total lift 29 feet.

Buckhorn Canal.

The works here are situated on the north bank of the Buckhorn Rapids, and are about a quarter of a mile in extent. They consist of a lift lock from Deer Bay into Buckhorn Lake, with wharves at both entrances, a regulating dam and slide, with the excavation at both ends of the lock for the outlets of the canal. A swing-bridge has also been erected across the lock here for the accommodation of travel.

This lock leads up to the level of Buckhorn, Chemong and Pigeon Lakes, extending to Bobcaygeon. Its lift is ten feet.

Bobcaygeon.

There is a lock here some ten years old ; it was built, I believe by the Ontario Government. No work has been recently done at this point, in so far as I am aware ; the lift is eight feet.

Fenelon Falls.

This canal is in the village of Fenelon and consists of two combined locks, with a short reach of canal above them leading into Cameron Lake.

Wharfing has been built at the lower entrance, and a swing bridge has been also placed across the upper lock for the accommodation of the main entrance to the village from the westward.

Stone was got out and dressed for the contemplated pier of a swing at the Victoria Railway bridge situated a short distance above the locks, but no action with regard to this swing has yet been taken.

The placing of the above mentioned swing across the upper lock, was the last work done, and it also completed the whole of what has been done, in the month of June of the present year. The total lift here is $23\frac{1}{2}$ feet.

Rosedale.

There is an old lock at this place, which is close to Balsam Lake, and hitherto maintained by the Ontario Government. There has, in so far as I am aware, been no recent expenditure upon it. Its lift is three feet.

These embrace all the works lying between Lakesfield and the summit level of a navigation that would extend from Trenton to Lake Huron, and they are all fairly completed, with the exception of some cleaning out of the channels lying between them, which is still required for the perfecting of the navigation, and various repairs or renewals to old structures, reports upon which are already before the Department.

I have the honor to be, Sir,

Your obedient servant,

D. STARK,

Superintending Engineer.

A. P. BRADLEY, Esq.,

Secretary, Department of Railways and Canals.

Ottawa.

APPENDIX No. 17.

ST. PETER'S CANAL.

OTTAWA, 28th September, 1888.

SIR,—I have the honor to submit the following with reference to the St. Peter's Canal:—

Navigation through the canal closed on the 7th January, and opened on the 28th April of the present year.

The following is a statement of the traffic through the canal during the year ended 30th June, 1888:—

Year.	Vessels.		Tonnage.		Tolls Collected.	
	North.	South.	North.	South.	North.	South.
	No.	No.	Tons.	Tons.	\$ cts.	\$ cts.
1887.						
July	150	102	9,432	8,160	128 15	117 48
August.....	171	115	6,020	5,071	142 18	53 75
September.....	176	146	5,841	5,351	144 50	125 20
October.....	180	155	12,011	10,017	194 20	165 72
November.....	140	110	6,274	4,608	95 14	63 86
December.....	94	132	9,000	5,000	105 10	175 15
1888.						
January.....	1	1	75	34	58	2 11
April.....	2	1	50	29	96	60
May.....	160	120	13,215	10,501	215 05	184 06
June.....	120	84	6,232	4,320	144 50	128 20
Totals.....	1,194	966	67,950	53,089	1,170 36	1,016 13

To this total of \$2,186.49 for tolls collected must be added the sum of \$450, paid as commutation by the steamer "Marion" for the season, making a grand total of \$2,636.49.

The lock and works in connection therewith remained in good order during the year, only requiring the ordinary amount of attention and repair.

I have, however, to call attention to the decayed state of the retaining wall on the western side of the canal, relative to which a special report will be submitted.

The repairs at the southern entrance to the canal, referred to in my report of last year, were satisfactorily completed.

I am, Sir,
Your obedient servant,

HENRY F. PERLEY,
Engineer in Charge.

A. P. BRADLEY, Esq.,
Secretary Department of Railways and Canals.
Ottawa.

APPENDIX No. 18.

ST. LAWRENCE NAVIGATION—TABLE OF DISTANCES—A.

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

From	To	Sections of Navigation.	Statute Miles.	
			Inter-mediate.	Total to Straits of Belle-Ile.
Straits of Belle-Ile	Cape Whittle	Gulf of St. Lawrence	240	240
Cape Whittle	West Point, Anticosti	do	201	441
West Point, Anticosti	Father Point	River St. Lawrence	202	643
Father Point	Rimouski	do	6	649
Rimouski	Bic	do	12	661
Bic	Isle Verte	do	39	700
Isle Verte (opp. Saguenay)	Quebec	do	126	826
Quebec	Three Rivers	do to Tide-water	74	900
Three Rivers	Montreal	do	86	986
Montreal	Lachine	Lachine canal	8 $\frac{1}{2}$	991 $\frac{1}{2}$
Lachine	Beauharnois	Lake St. Louis	16 $\frac{1}{2}$	1,009 $\frac{1}{2}$
Beauharnois	Ste. Cécile	Beauharnois Canal	11 $\frac{1}{2}$	1,021
Ste. Cécile	Cornwall	Lake St. Francis	32 $\frac{1}{2}$	1,053 $\frac{1}{2}$
Cornwall	Dickinson's Landing	Cornwall Canal	10 $\frac{1}{2}$	1,065 $\frac{1}{2}$
Dickinson's Landing	Farran's Point	River St. Lawrence	5	1,070 $\frac{1}{2}$
Farran's Point	Upper end of Croyle's Island	Farran's Point	3 $\frac{1}{2}$	1,071
Upper end of Croyle's Island	Williamsburg or Morrisburg	River St. Lawrence	10 $\frac{1}{2}$	1,081 $\frac{1}{2}$
Williamsburg	Rapide Plat	Rapide Plat Canal	4	1,085 $\frac{1}{2}$
Rapide Plat	Point Iroquois Village	River St. Lawrence	4 $\frac{1}{2}$	1,090
Point Iroquois Village	Upper end Presqu'île	Point Iroquois Canal	3	1,093
Presqu'île	Point Cardinal, Edwardsburg	Junction Canal	2 $\frac{1}{2}$	1,095 $\frac{1}{2}$
Point Cardinal	Head of Galops Rapids	Galops Canal	2	1,097 $\frac{1}{2}$
Galops Rapids	Prescott	River St. Lawrence	7 $\frac{1}{2}$	1,105
Prescott	Kingston	do	59	1,164
Kingston	Port Dalhousie	Lake Ontario	170	1,334
Port Dalhousie	Port Colborne	Welland Canal	26 $\frac{1}{2}$	1,360 $\frac{1}{2}$
Port Colborne	Amherstburg	Lake Erie	232	1,592 $\frac{1}{2}$
Amherstburg	Windsor	River Detroit	18	1,610 $\frac{1}{2}$
Windsor	Foot of St. Mary's Island	Lake St. Clair	25	1,635 $\frac{1}{2}$
Foot of St. Mary's Island	Sarnia	River St. Clair	33	1,668 $\frac{1}{2}$
Sarnia	Foot of St. Joseph's Island	Lake Huron	270	1,938 $\frac{1}{2}$
Foot of St. Joseph's Island	Foot of Sault Ste. Marie	Foot of Sault Ste. Marie	47	1,985 $\frac{1}{2}$
Foot of Sault Ste. Marie	Head of Sault Ste. Marie	Sault Ste. Marie Canal	1	1,986 $\frac{1}{2}$
Head of Sault Ste. Marie	Pointe aux Pins	River St. Mary	7	1,993 $\frac{1}{2}$
Pointe aux Pins	Port Arthur	Lake Superior	266	2,259 $\frac{1}{2}$
Port Arthur to Lake Shebandowan			45	
Lake Shebandowan to North-West Angle			312	
North-West Angle to Winnipeg			95	
Pointe aux Pins to Duluth			390	

Of the 2,259 $\frac{1}{2}$ miles from the Straits of Belle-Ile to the head of Lake Superior, 71 miles are artificial navigation, and 2,188 $\frac{1}{2}$ open navigation.
 Straits of Belle-Ile to Liverpool, 1,942 geographical or 2,234 statute miles.
 The total fall from Lake Superior to Tide-water is about 600 feet
 The steamboat voyage from Collingwood to Port Arthur is 532 miles.

APPENDIX No. 19.

TABLE of distances of Stations between the cities of Ottawa and Kingston.

No. of Station.	Name of Station.	Distances from Ottawa.	Locks.		Dams			Length of Artificial Canal at each Station, in miles.	
			No.	Lift at Low Water.	No.	Length.	Height.		
				Rise. Ft. In.					Feet.	Feet.
1	Ottawa.....	0	8	82 0	3	230 1,320 1,616	18 33 14	4.00	
2	Hartwell's.....	4 1/4	2	22 0	.....	100	28	
3	Hogsback.....	5 1/4	2	13 6	1	320	60		
4	Black Rapids.....	9 1/4	1	10 0	1	300	12		
5	Long Island.....	14 3/4	3	27 0	3	850	63		
6	Burritt's.....	40 3/4	1	10 6	1	240	14		
7	Nicholson.....	43 3/4	2	15 2	1	500	9		
8	Clowes.....	44 3/4	1	10 0	1	481	16		
9	Merrickville.....	46 3/4	3	25 0	1	150	6		
10	Maitland.....	55	1	4 9	1	270	8		
11	Edmunds.....	59 1/4	1	10 10	1	343	8		
12	Old Slys.....	60 1/4	2	15 6	1	250	20		
13	Smith's Falls.....	61 1/4	4	33 9	2	600	24		
14	First Rapids or Poonamalie.....	61 1/4	1	7 9	1	260	5		
15	Narrows.....	83 1/4	1	4 0	1	600	9		
Total rise at low water.....			292 3						
			Fall.						
16	Isthmus.....	87 1/4	1	4 0	1.25	
17	Chaffey's.....	92	1	12 6	0.13	
18	Davis.....	94 1/4	1	9 0	1	300	15	0.06	
19	Jones' Falls.....	97 1/4	4	60 0	1	300	60	0.25	
20	Brewer's Upper Mills.....	108 1/4	2	19 0	1	200	20	1.75	
21	do Lower Mills.....	110	1	14 2	1	200	12	4.25	
22	Kingston Mills.....	120 1/4	4	46 8	1	6,042	14	0.25	
23	Kingston.....	126 1/4							
Total fall at low water.....			165 4						
Total.....			47			24	15,472		16.46

APPENDIX No. 20.

TABLE showing the dates of the closing of the Canals in the Autumn of 1887 and of the opening in the Spring of 1888.

Canals.	Closing.	Opening.
Lachine Canal	30 November, 1887.	1 May, 1888.
Beauharnois Canal	1 December, 1887.	1 May, 1888.
Cornwall Canal	4 December, 1887.	2 May, 1888.
Williamsburg Canal	5 December, 1887.	2 May, 1888.
Welland Canal—		
New Canal	5 December, 1887.	1 May, 1888.
Old Canal		
St. Anne's Lock and Dam	28 November, 1887.	2 May, 1888.
Carillon Canal	30 November, 1887.	2 May, 1888.
Grenville Canal		
Culbute Lock and Dam	30 November, 1887.	2 May, 1888.
Chute à Blondeau		
Rideau { Kingston Mills	25 November, 1887.	3 May, 1888.
Ottawa		
St. Ours Lock	25 November, 1887.	19 April, 1888.
Chambly Canal	1 December, 1887.	5 May, 1888.
Erie Canal (New York)	1 December, 1887.	10 May, 1888.
St. Peter's Canal (Cape Breton)	7 January, 1888.	28 April, 1888.
Trent Canal Works	25 November, 1887.	20 April, 1888.

APPENDIX No. 21.

STATEMENT of Contracts entered into between 1st July, 1887, and 30th June, 1888.

Railways and Canals.	Deed, Letter or otherwise, under which Contract was made.	Name of Contractor.	Date of Contract.	General Description.
Subsidized Railways.....	Contract 8,814...	Great Northern Railway Co.....	Aug. 19, 1887	Subsidy agreement, from $\frac{1}{2}$ mile west of New Glasgow, to Montcalm, Que.
do	do 8,816...	Great North-West Central Railway Co.	Sept. 12, 1887	Subsidy agreement, from Brandon on Canadian Pacific Railway to Battleford, 450 miles, (land subsidy).
do	do 8,829...	Western Counties Railway Co.	July 22, 1887	Supplemental agreement, re debentures at 5 per cent., &c. (amend No. 8,701).
do	do 8,977...	Western Counties Railway Co.	Feb. 9, 1888	Agreement re debenture stock, 4 per cent. interest payable by Government.
do	do 8,901...	Dominion Lime Co.....	Oct. 12, 1887	Subsidy agreement, from junction with Quebec Central Railway in 3rd con. Dunsell, to quarries of Dunsell Lime Co., and Dominion Lime Co., County of Wolfe, Que.
do	do 8,910...	Harvey Branch Railway Co.....	do 3, 1887	Subsidy agreement, from south end of Albert Railway to Harvey Bank, N.B., 3 miles
do	do 8,911...	Joggins Railway Co.	do 13, 1887	Subsidy agreement, from south end of subsidized portion (by 49 Vic, chap. 10) to wharves of Cumberland Basin, N.S., $1\frac{1}{4}$ miles.
do	do 8,915...	Montreal and Lake Maskinongé Railway Co.	Sept. 29, 1887	Subsidy agreement, from St. Felix de Valois to St. Gabriel de Brandon, Que., 10 miles.
do	do 8,944...	Guelph Junction Railway Co....	Nov. 5, 1887	Subsidy agreement, 16 miles from Canadian Pacific Railway near Campbellville to Guelph.
do	do 8,948...	Beauharnois Junction Railway Co.....	do 21, 1887	Subsidy agreement, from Ste. Martine to Valleyfield, Que. about 20 miles.
do	do 8,949...	Nova Scotia Central Railway Co.	Oct. 12, 1887	Subsidy agreement, from Lunenburg to District of New Germany, and branch to Bridgewater Railway Wharf. in all about 34 miles.
do	do 8,950...	Montreal and Champlain Junction Railway Co.	Jan. 25, 1888	Subsidy agreement, from Fort Covington to Massena Springs, 21 $\frac{1}{4}$ miles.

do	8,863...	Fredericton and St. Mary's Railway Bridge Co	Oct.	1887	Subsidy agreement, (mortgage) Bridge between Fredericton and St. Mary's, N. B.	
do	8,897...	Drummond County Railway Co.	Dec. 1,	1887	Subsidy agreement, line from South Eastern Railway at Drummondville village, to the south west branch of Nicolet River, about 12½ miles.	
do	8,998	Bellefleur and North Hastings Railway Co.	do	12,	1887	Subsidy agreement, line from Madoc village to junction with Central Ontario Railway at Eldorado, 6.94 miles.
do	9,165	Hereford Branch Railway Co...	March 31,	1888	Subsidy agreement, Railway from International Railway in 8th Range, Co. Keshire, to Station 1010 in Range B, Auckland, Compton County, Que., 19½ miles.	
do	9,175	Minudie Railway Co. (Limited)	do	26,	1888	Subsidy agreement, from junction with Jaggins Railway near River Hebert, Railway bridge to village of Minudie, Cumberland County, N.S., 4 miles.
do	9,283...	Cumberland Railway and Coal Co	April 12,	1888	Subsidy agreement, Spring Hill, N.S., to Oxford and New Glasgow Railway, near village, N.S., 14 miles.	
do	9,286...	Great Eastern Railway Co	March 16,	1888	Subsidy agreement, St. Francis River at Pierreville, to Grand Trunk Railway at St. Gregoire Station, 21½ miles.	
do	9,290...	Lake Erie, Essex and Detroit River Railway Co.	April 6,	1888	Subsidy agreement, Walkerville, on Detroit River, to Cedar Creek Station, in Town-ship S, Colchester, Essex County, Ont.	
do	9,291...	Cornwalls Valley Railway Co. (Limited)	May 28,	1888	Subsidy agreement, Kentville to Kingsport, King's County, N.S.	
do	9,299...	St. Catharines and Niagara Central Railway Co.	March 5,	1888	Subsidy agreement, City of St. Catharines to bridge over Niagara River.	
do	9,371...	St. John Valley and Rivière du Loup Railway Co.	June 26,	1888	Subsidy agreement, Fredericton towards Woodstock N.B., 44 miles.	
do	9,387..	Baie des Chaleurs Railway Co	June 2,	1888	Subsidy agreement, to apply \$96,000 of Act 46 V., c. 25 to the 30 miles between the 40th and 70th miles, in lieu of to last 30 miles. Metapedia to Casp-diac	
do	9,442...	Tobique Valley Railway Co...	Sept. 4,	1888	Subsidy agreement, from Perth Centre Station of New Brunswick Railway, 14 miles towards Plaster Rock Island.	
do	9,479...	South Norfolk Railway Co	Aug. 28,	1888	Subsidy agreement, 17 miles, from Port Rowan to Town of Simcoe, Ont.	
do	9,480...	Ontario and Quebec Railway Co	Sept. 4,	1888	Subsidy agreement, 65 miles, from London to Chatham, Ont.	
do	9,486...	Napanee, Tamworth and Quebec Railway Co.	July 31,	1888	Subsidy agreement, 20 miles of railway, Tamworth to Tweed, Ont.	
do	9,491...	Branford, Waterloo and Lake Erie Railway Co	Aug. 16,	1888	Subsidy agreement, 16½ miles of railway, Branford to Waterford, Ont.	
do	9,497...	Qu'Appelle, Long Lake and Saskatchewan Railway and Steamboat Co...	do	31,	1888	Transport of Government supplies, Regina, to Saskatoon.

STATEMENT of Contracts entered into between 1st July, 1887, and 30th June, 1888—Continued.

Railways and Canals.	Deed, Letter or otherwise, under which Contract was made.	Name of Contractor.	Date of Contract.	General Description.
Cape Breton Railway...	Contract 8,827...	Isbester & Reid.....	July 27, 1887	Construct that part of Cape Breton Railway from Strait of Canso to the Grand Narrows, Cape Breton, N. S., 46 miles
do	do 9,494...	W. J. Sims	June 21, 1888	Grading on Cape Breton Railway, from 20th mile to 24 miles east of Grand Narrows.
do	do 9,495...	Ross & McDonald.....	do 26, 1888	Grading on Cape Breton Railway, from 24th mile to 29½ miles east of Grand Narrows.
do	do 9,496...	John McKeen & Co	do 25, 1888	Grading on Cape Breton Railway, from 42nd mile to terminus at Battery Point and branch to connect with International Coal Company's railway.
do	do 9,505...	McNeil, McDougall & McNeil...	do 19, 1888	Grading, &c., Cape Breton Railway, from Station O to 8th mile.
do	do 9,508...	McAdam & Grant.....	do 19, 1888	Grading, &c., Cape Breton Railway, from 8th to 13th mile.
do	do 9,232...	Isbester & Reid.....	Feb. 27, 1888	Construct a crib block at Point Tupper, N. S., for Cape Breton Railway.
Oxford and New Glasgow Railway	do 8,913...	McDonald & O'Brien.....	Oct. 3, 1887	Construct section of Oxford and New Glasgow Railway, from Oxford Station to Oxford and Birch Kidge Road, N. S., 3 miles.
do	do 8,931...	Rhodes, Curry & Co	do 27, 1887	Station buildings at Oxford Junction of Oxford and New Glasgow Railway.
do	do 9,001...	Gray, McManus, Trites & Co ..	Nov. 18, 1887	Construct 28 miles, Mingo to Pictou Branch, for Oxford and New Glasgow Railway.
do	do 9,037...	McDonald, O'Brien & Co	Jan. 5, 1888	Build Section 1, Oxford and New Glasgow Railway, Birch Hill Road to Pugwash, 13 miles.
do	do 9,039...	do	do 5, 1888	Build Section 3, Oxford and New Glasgow Railway, Pugwash Junction to Wallace, 7 miles.
do	do 9,042...	Stewart & Jones.....	Dec. 16, 1887	Build Section 4, Oxford and New Glasgow Railway, Wallace Station to Mingo Road, 17 miles.
do	do 9,044...	Donald Sutherland.....	Jan. 5, 1888	Build Section 2, Oxford & New Glasgow Railway, Pugwash Junction to Pugwash, 6 miles.
do	do 9,063...	Chas. Cammell & Co. (Limited)	Dec. 28, 1887	Supply 7,000 tons steel rails for Oxford & New Glasgow Railway, delivered on Intercolonial Railway wharf at Halifax.
do	Contract 9,326...	Archibald Campbell	Feb. 29, 1888	Supply 9,000 hemlock ties for Oxford & New Glasgow Railway, delivered 7,000 between Deverais River and French River, 2,000 west and near Mingo Road.

do	9,234...	J. C. McDougall and T. Giles..	March 26, 1888	Construct a wharf at Pugwash Harbor, N. S., Oxford & New Glasgow Railway.
do	9,295...	R. L. Black	April 28, 1888	Supply 91,000 railway ties for Oxford & New Glasgow Railway.
do	9,453...	McDougall & Giles.....	July 19, 1888	Construct 3/4 mile Section of Oxford & New Glasgow Railway from Station 220 Pugwash branch to Pugwash railway wharf.
do	9,009...	Barrow Hematite Steel Co. (Limited).....	Oct. 5, 1887	Supply 500 tons steel flange rails, 50 lbs per yard, and flatplates for Prince Edward Island Railway, delivered Charlottetown. P. E. I.
do	9,034...	Patent Nut and Bolt Co. (Limited).....	Oct. 28, 1887	Supply 4 tons of iron bolts and nuts for Prince Edward Island Railway, delivered f. o. b. ship at Barrow-in-Furness.
do	9,236...	John R. Larkin	Jan 17, 1888	Deliver sleepers for Prince Edward Island Railway, 37,000 hemlock ties, 10,000 black spruce, between Wellington and Bloomfield Stations.
do	9,237...	A. McKinnon	do	Deliver sleepers for Prince Edward Island Railway, 10,000 hemlock ties at Coleman Station.
do	9,238...	Richard Smallman.....	do	Deliver sleepers for Prince Edward Island Railway, 1,500 hemlock ties delivered at O'Leary Station.
do	9,239...	F. T. Arsenault.....	do	Deliver sleepers for Prince Edward Island Railway, 1,500 hemlock ties between Northern and St. Nicholas Station.
do	9,240...	Robert Ellis (senior).....	do	Deliver sleepers for Prince Edward Island Railway, 5,000 hemlock ties at O'Leary Station.
do	9,241...	Donald McKenzie.....	do	Deliver sleepers for Prince Edward Island Railway, 500 hemlock ties at Northern Station.
do	9,242...	Edward Lidstone.....	do	Deliver sleepers for Prince Edward Island Railway, 800 hemlock ties between lot 10 and Bloomfield Station.
do	9,243...	Neil Buchanan.....	do	Deliver sleepers for Prince Edward Island Railway, 600 hemlock ties on Prince Edward Island Railway.
do	9,380...	Archibald & Co.	May 23, 1888	Supply 6,500 tons coal for Prince Edward Island Railway.
do	9,395...	Barrow Hematite Steel Co (Limited).....	do	Supply 400 tons steel flange, 50 lbs. per yard, for Prince Edward Island Railway.
do	9,396...	Bayliss, Jones & Bayliss.....	do	Supply 3 tons bolts and nuts for Prince Edward Island Railway.
do	8,927...	Intercolonial Coal Mining Co (Limited).....	July 1, 1887	Supply 24,000 tons (2,240 lbs.) of round coal for Intercolonial Railway, delivered f. o. b. on cars at Drummond siding, as required by storekeeper, for the year commencing 1st July, 1887.
do	8,934...	John F. Teed.....	Sept. 16, 1887	Coal shed and trestle at Amherst, N. S., for Intercolonial Railway.
do	8,935...	do	do	A 15,000 gallons water tank at Indian town for Intercolonial Railway (Indian town branch).
do	8,936...	G. O. Dunham.....	do	Blacksmith's shop, Moncton, for Intercolonial Railway.

STATEMENT of Contracts entered into between 1st July, 1887, and 30th June, 1888—Continued.

Railways and Canals.	Deed, Letter or otherwise, under which Contract was made.	Name of Contractor.	Date of act.	General Description.
Intercolonial Railway.....	Contract 8,937...	C. Gagnon.....	July 30, 1887	Embankment and pile bridge approach from Sackville Branch to the New Brunswick and Prince Edward Railway wharf, at Sackville, N. B., for Intercolonial Railway.
do	do 8,938...	R. R. Call.....	Aug. 23, 1887	Coal shed and trestle at Ste. Flavie, P. Q., for Intercolonial Railway.
do	do 8,939...	do	Sept. 9, 1887	Stone ash pit at Ste. Flavie, P. Q., for Intercolonial Railway.
do	do 8,940...	James Browne.....	Aug. 27, 1887	Addition to freight shed, Kent Junction, for Intercolonial Railway.
do	do 8,941...	T. C. Connor & R. C. Donald.....	Sept. 9, 1887	To relevel No. 2 wharf at Richmond, for Intercolonial Railway.
do	do 8,942...	A. McQueen & H. Cameron.....	Aug. 17, 1887	Freight shed at Antigonish, N.S., for Intercolonial Railway.
do	do 8,943...	John F. Teed.....	Sept. 9, 1887	Paint shop at Moncton, N.B., for Intercolonial Railway.
do	do 8,946...	Jas. Brown.....	do 16, 1887	Build a coal shed and trestle at Shediac, N. B., for Intercolonial Railway.
do	do 8,951...	Wm. Starkey.....	do 26, 1887	Construct six 60,000 gallon water tanks, viz: at Hampton, Petitcodiac, Red Pine, St. Fabien, Ste. Anne and St. Charles, for Intercolonial Railway.
do	do 8,953...	Jas. Brown.....	do 21, 1887	Station building and freight room, Adamsville, N.B., for Intercolonial Railway.
do	do 8,954...	Jas. O. Fish.....	do 9, 1887	Repair wharf at Newcastle, N.B., for Intercolonial Railway.
do	do 8,955...	Henry White.....	do 12, 1887	Masonry under crossing at Bathurst, N.B., for Intercolonial Railway.
do	do 8,956...	D. Gallant.....	Aug. 31, 1887	addition and repairs, Rogersville Station, N.B., for Intercolonial Railway.
do	do 8,978...	A. Grant & Sons.....	Sept. 9, 1887	Build a wooden overhead bridge at Morency's Crossing, for Intercolonial Railway.
do	do 8,979...	E. T. Nesbitt.....	do 16, 1887	Build snow shed at St. Arène, for Intercolonial Railway.
do	do 8,980...	do	do 16, 1887	near Isle Verte, do
do	do 8,981...	David Roy & Frère.....	Aug. 9, 1887	Build station at Cap St. Ignace, do
do	do 8,982...	John P. Moraw.....	Sept. 25, 1887	do Flatlands, do

do	8,983...	do	Barry & Powers	do	16, 1887	Build snow fence, 1,000 lineal rods, between Ste. Flavie and Lévis, for Intercolonial Railway.
do	8,984...	do	Philibert Ouellet	do	16, 1887	Build addition to machine shop, Rivière du Loup, for Intercolonial Railway.
do	8,986...	do	Cumberland Railway and Coal Co.	July 30, 1887	Supply 120,000 tons round coal, for Intercolonial Railway, delivered at Spring Hill Junction.	
do	8,989...	do	A. Grant & Sons	Sept. 25, 1887	Build snow chute near Assaméquegan Station, for Intercolonial Railway.	
do	8,990...	do	Jas. Brown.....	Oct. 12, 1887	Build coal trestle at Dorchester, N B, for Intercolonial Railway.	
do	8,991...	do	do	do	12, 1887	Build coal trestle at Sussex.
do	8,992...	do	Carrier, L'Ainé & Co.....	Sept. 16, 1887	Build iron snow sheds— 1,000 lineal feet, at $\frac{1}{2}$ mile south of Harlakon 564 do at $\frac{1}{2}$ mile north do 300 do at $\frac{1}{2}$ mile north do	
do	8,993...	do	R. R. Oail	Oct. 17, 1887	Build snow fence between Newcastle and Campbellton.	
do	8,994...	do	Angus McQueen & Co.....	do	22, 1887	Build cribwork at Pictou, N.S., near engine house, Intercolonial Railway.
do	9,006...	do	Jas. Brown.....	do	17, 1887	Construct snow fence between Moncton, and Newcastle, Intercolonial Railway.
do	9,036...	do	J. F. Teed.....	Nov. 22, 1887	Build coal shed and trestle at Spring Hill Junction, Intercolonial Railway.	
do	9,054...	do	Dubs & Co., of Glasgow, Scotland.....	1888	Construct 5 four-wheeled locomotive engines, delivered at Halifax in bond, Intercolonial Railway.	
do	9,174...	do	Macdonald Co. (Limited)	Feb. 6, 1888	Fit up pipes to heat by steam the paint shop, Moncton, Intercolonial Railway.	
do	9,228...	do	McQueen & Cameron	do	4, 1888	Construct a coal shed at Stellarton, N S, for Intercolonial Railway.
do	9,284...	do	Wm. Lewis & Son.....	do	22, 1888	Construct 2 overhead bridges for Intercolonial Railway at Roaches, near Nappan, N.S., and at Middle River Road, near Bathurst, N. B.
do	9,292...	do	Robt. Smith.....	March 6, 1888	Construct a pontoon and shed, Lévis, for St. Charles Branch, Intercolonial Railway.	
do	9,315...	do	John F. Teed.....	April 10, 1888	Build a creosoted pile wharf and freight shed at Pictou N.S., for Intercolonial Railway.	
do	9,331...	do	Julien Ohaot.....	1888	To run his steamer "Admiral" on Baie des Chaleurs, between Dalhousie and Gaspé (or other points if required), in connection with the Intercolonial Railway, for five years.	
do	9,357...	do	D. Hallisey.....	March 17, 1888	Fencing on Intercolonial Railway— 640 rods bet. Windsor Junction and Mount Uniacke.	
do	9,368...	do	J. O. Calhoun	do	17, 1888	126 do Painséc Junction and Pointe du Chêne 640 do Newport and Windsor.
do	9,359...	do	Jas. Geddes	do	17, 1888	3,676 do Amherst and Painséc Junction.
do	9,360...	do	Sumner & Co.....	do	17, 1888	1,280 do Moncton and Newcastle.
do	9,361...	do	Del. Gunn	do	17, 1888	4,875 do St. Henri and Chaudière. 2,160 do Campbellton and Ste. Flavie.
do		do		do	17, 1888	Truro and Londonderry.

STATEMENT of Contracts entered into between 1st July, 1887, and 30th June, 1888—Continued.

Railways and Canals.	Deed, Letter or otherwise, under which Contract was made.	Name of Contractor.	Date of Contract.	General Description.
Intercolonial Railway	Contract 9,362...	S. M. Dunn	March 17, 1888	1,450 do Newcastle and $\frac{1}{2}$ point five miles west of Beaver Brook
do	do 9,363...	Sutherland & McQuarrie	do 17, 1888	do 510 Sussex and Bloomfield
do	do 9,364...	Humphreys & Trives	do 10, 1888	do 3,840 Ste. Flavie and Rivière de Loup.
do	do 9,356...	Canada Locomotive & Engine Co. (Limited)	May 25, 1888	do 1,090 Boundary Creek and Penobscuis.
do	Contract 9,376...	Robt. Maxwell	April 16, 1888	Fourteen locomotives, heavy four-wheeled, for Intercolonial Railway Fencing on Intercolonial Railway— Between Londonderry and Spring Hill, 5,040 rods.
do	do	do	do	do Spring Hill and Amherst, 1,530 rods.
do	do	do	do	do Mulgrave and Antigonish, 3,100 rods.
do	do	do	do	do Windsor Junction and Truro, 2,300 rods.
do	do	do	do	do Picton Landing and St. Martin, 320 rods.
do	do	do	do	do Antigonish and New Glasgow, 3,000 rods.
do	do	do	do	do Riverside and Valley, 2,400 rods.
do	do	do	do	do Red Pine and $\frac{1}{2}$ point 5 miles south of Petite Roche, 775 rods.
do	do	do	do	do Belladune and Jacques River, 20 rods.
do	do	do	do	do Charlot and Dalhousie Junction, 75 rods.
do	do	do	do	do Old rail girders for Intercolonial Railway— 3 pairs of 19 $\frac{1}{2}$ feet span, 1 pair 18 feet span, 2 pairs 17 $\frac{1}{2}$ feet span.
do	do	do	do	do 4 pairs of 15 feet span, 1 pair 14 $\frac{1}{2}$ feet span, 3 pairs 14 feet span, 6 pairs 12 feet span.
do	do	do	do	do Supply 5,000 tons steel flange rails (67 lbs. per yard) for Intercolonial Railway.
do	do	do	do	do Express business on Intercolonial Railway, extended to Eastern Extension Railway.
do	do	do	do	do Supply about 15,000 tons round coal for Intercolonial Railway, for 12 months from 1st July, 1888.
do	do	do	do	do Supply about 15,000 tons round coal for Intercolonial Railway, for 12 months from 1st July, 1888.

APPENDIX
GENERAL STATE

1st. Water Power and other Public Property leased on Canals

Date of Signature.	Term of Lease.	Lessees.	Property Leased.	For what purpose used.
<i>Intercolonial Railway.</i>				
Mar. 29, '88	1 year	Canada Ry. News Co.	License to sell books, &c., at St. John Station.	.....
July 1, '88	do	do	License to sell books, &c., on I. C. Ry train.	.....
do 1, '88	do	Jos. Fortin.....	License to sell books, &c., Point Lévis to Campbellton.	.....
Feb. 21, '88	5 do	King Bros.....	Lease of Hadlow Wharf, County of Lévis and lots A, B, C, near it.	Wharf.....
<i>Cornwall Canal.</i>				
Mar. 13, '88	Pleasure of the Government	Lemay & Campbell.	Lot S. of Water St., Cornwall, opp. Amelia St.	Coal ground.....
<i>Welland Canal.</i>				
Oct. 11, '87	do ...	C. J. Page.....	Surplus water from raceway, town of Welland.	Electric light for town.
do 26, '87	do ...	C. Swayze.....	Pt. lot 26 in 5th Con., Crowland, town of Welland.	Outbuildings.....
Nov. 10, '87	50 years	St. Catharines & Niagara Cen Ry. Co.	Railway right of way on canal lands in Thorold and Gratham.	Railway
Dec. 24, '87	21 years renewable forever.	Corporation, Village, Merritton.	Marlatt's Pond, near Guard Lock and raceway, to supply water to Merritton.	Settling pond....
Jan. 12, '88	Pleasure of the Government	Rolston & Haskins...	Pt. of Mittleberger Mill site, &c., Dunnville.	Electric light for village.
<i>Beauharnois Canal.</i>				
do 13, '88	21 years renewable forever.	Corporation, Salisbury de Valleyfield.	Water lot No. 830, at Valleyfield, below dam to Grande Isle.	Water supply for town.
do 13, '88	do ...	Valleyfield Electric Co. (Lim)	Water lot No. 830, at Valleyfield, below dam to Grande Isle.	Electric light for town.
do 13, '88	Pleasure of the Government	Estate Jas. McDonald	Water lot No. 820, at Valleyfield, below dam to Grande Isle.	Yard for grist mill.
<i>Prince Edward Island</i>				
June 23, '88	Revocable at any time.	Water Comm'rs. town of Charlottetown.	Permission to lay a water pipe under P. E. I. Railway lands near Charlottetown.	Water supply for town.
<i>Rideau Canal, &c.</i>				
May 1, '88	Pleasure of the Government.	W. W. Bedford	Part lot No. 21, 5th Con., S. Elmsley, at Olivers Ferry.	Summer residence
April 28, '88	do ...	Rideau Skating and Curling Club.	Part of Reserve, S. of Deep Cut, and S. of Maria St., Ottawa.	Boat house, skating and curling club.

No. 21.

MENT SHOWING

and Railways, during the Fiscal Year ended 30th June, 1888.

Amount of Water Power Leased	Area of Property Leased.	Date from which Lease is reckoned.	Annual Rental.	Terms of Payment.			Remarks.
				Amount of each instalment.	When Due each Year.	When first instalment was Due.	
			\$ cts.	\$ cts.			
.....	.....	Mar. 1, '88	300 00	75 00	Quarterly.	Mar. 1, '88	
.....	.....	July 1, '88	1,232 56	102 71	Monthly...	July 1, '88	In advance.
.....	.....	do 1, '88	400 00	33 34	do ...	do 1, '88	do
.....	.....	June 1, '88	200 00	.....	.....	.....	Lessees to expend rental of \$200 in repairs and maintenance of wharf.
.....	15 X 90 ft. X 4 ft.	April 1, '88	10 00	10 00	April 1....	On delivery of lease.	In advance.
20 h. p.	.....	Oct. 1, '87	120 00	120 00	Oct. 1....	Oct. 1, '87	do
.....	0.03 acres.	July 1, '87	5 00	5 00	July 1....	On delivery of lease.	He paid \$20 for past occupation.
.....	.....	Nov. 10, '87	1 00	00	Nov. 10....	Nov. 10, '88	
16 X 1 1/2 in. pipes	300 X 230 ft.	Jan. 1, '88	400 00	200 00	1 Jan. and 1 July..	July 1, '88	One year free of rent, to build.
25 h. p.	0.30 acres.	do 1, '88	115 00	115 00	Jan. 1....	On delivery of lease.	In advance. Cancels lease No. 8,641. Water, 25 h. p. at \$1, = \$100; land, \$15.
30 h. p.	105 X 30 ft.	Jan. 1, '87	105 00	52 50	1 Jan. and 1 July..	July 1, '87	Cancels lease, No. 8,510.
30 do	90 X 30 ft.	do 1, '88	105 00	52 50	do ...	do 1, '88	
.....	1,500 feet.	Oct. 1, '87	15 00	15 00	Oct. 1....	On delivery of lease.	
.....	.....	.....	Free.....	.....	.....	.....
.....	0.76 acres.	May 1, '88	3 00	3 00	May 1....	On delivery of lease.	In advance.
.....	0.83 do	April 1, '88	125 00	31 25	Quarterly.	do	do

GENERAL STATEMENT showing: 1st. Water Power and other

Date of Signature.	Term of Lease.	Lessees.	Property Leased.	For what purpose used.
			<i>Lachine Canal.</i>	
July 19, '87	5 years, then 15 years.	C. M. Acer	Part of lot No. 328, St. Ann's Ward, Montreal.	Hotel.....
Feb. 1, '88	Pleasure of the Government.	Grand Trunk Ry. Co. of Canada.	The Government Railway siding, W. of Wellington Basin, Montreal.	Loading coal cars.
Aug. 30, '87	do ...	E. Ouellette & Co....	Lot above locks at Lachine, between old canal and upper entrance of new canal.	Storing coal and wood.
Nov. 23, '87	do ...	"City of Montreal."	Canal land at waste weir, Basin No. 2, and dyke Montreal inundations.	Sewerage pumping station.
do 9, '87	do ...	A. W. Ogilvie & Co.	Lot N. W. of Mill St, Montreal, N. of waste weir, Basin No. 2, for shelter in day time.	Office and shed..
May 25, '88	do ..	Montreal Street Ry. Co.	Lay a double track over Wellington St. bridge, Montreal.	Street cars.....
Jan. 18, '88	9 months.	George End	Lots 10, 11, W. of St. Gabriel Basin No. 3, Montreal.	Storing lumber..
May 1, '88	Pleasure of the Government.	Père Poulin	Lots Nos. 1 and 2, W. of St. Gabriel Basin No. 4, Montreal.	do ...
do 2, '88	do ...	Louis Fortin.....	Lots on N. W. side of canal at Ste. Cunegonde.	Coal yard
April 27, '88	do ...	Canadian Pacific Ry. Co. lessees of Atlantic & N. W. Ry.	Lay a track on spoil bank, N. of canal at Lachine.	Switch.....

Public Property leased on Canals and Railways, &c.—*Concluded.*

Amount of Water Power Leased.	Area of Property Leased.	Date from which Lease is reckoned.	Annual Rental.	Terms of Payment.			Remarks.
				Amount of each instalment.	When Due each Year.	When first instalment was Due.	
			\$ cts.	\$ cts.			
.....	600×100 ft.	Dec. 1, '87	600 00	600 00	Dec. 1....	On delivery of lease.	Cancels lease, No. 6,866. Rent reduced to \$400 for first year, from 1st Dec., 1887. By O. C.
.....	862 ft. long	Aug. 1, '85	120 00	10 00	Monthly..	1st of each month....	
.....	13,420 ft..	May 1, '85	30 00	30 00	May 1....	do ...	And landing dues only.
.....	Dyke and 85×34 ft.	Sept. 1, '87	1 00	1 00	Sept. 1....	do ...	
.....	2,278 ft....	do 1, '87	10 00	10 00	do 1....	do ...	
.....	.....	Jan. 1, '88	1 00	1 00	Jan. 1....	Jan. 1, '88	
.....	23,214 ft...	Aug. 1, '87	200 00	200 00	.....	Dec. 17, '87	Lapsed 1st May, 1888.
.....	19,046 ft...	Jan. 16, '88	380 92	380 92	May 1...	On delivery of lease.	Cancels, No. 8,399.
.....	80 × 50 ft.	May 1, '88	40 00	40 00	do 1....	do ...	
.....	1,840 feet long.	do 1, '88	10 00	10 00	do 1....	do ...	

2nd. PROPERTY purchased or damaged, and property sold by the Department of Railways and Canals as not being required for the Railways or Canals of the Dominion, during the Fiscal Year ended 30th June, 1888.

Date of Signature.	Vendors.	Purchasers.	PROPERTY PURCHASED, SOLD OR DAMAGED.			For what Purpose.	Area of Land.	Amount Paid.	Remarks.
			Cape Breton Railway.						
			Lots.	District.	County.				
Jan. 13, 1887	H. McNeil	Her Majesty.	4	Grand Narrows	Cape Breton	Oape Breton Ry.	5.72	28 60	
do 13, 1887	H. D. McNeil	do	5, 6	do	do	do	6.20	6 20	
do 13, 1887	Donald McNeil	do	8	do	do	do	2.10	2 10	
do 13, 1887	Roderick McNeil	do	9	do	do	do	2.80	5 60	
do 13, 1887	Allan McNeil	do	11	do	do	do	2.10	72 40	Of which, \$44 for quarry.
do 14, 1887	John McNeil	do	12	do	do	do	3.40	8 50	And extra clear-
do 14, 1887	John McKinnon	do	13	Christmas Island	do	do	2.00	5 50	ing.
do 13, 1887	Donald McNeil	do	14	do	do	do	1.30	1 30	
do 15, 1887	John McNeil	do	16	do	do	do	1.20	3 60	
do 15, 1887	R. O. Epis	Diocese of Antigonish.	17	do	do	do	3.80	162 00	And extra clear-
do 14, 1887	J. McKinnon	do	18	do	do	do	0.20	5 20	ing.
do 14, 1887	A. McNeil	do	19	do	do	do	1.50	62 40	
do 15, 1887	M. McDougall	do	24	do	do	do	7.80	13 00	
do 15, 1887	M. McKenzie	do	25	do	do	do	1.50	7 00	
do 15, 1887	M. McDougall	do	26	do	do	do	1.40	10 40	
do 15, 1887	M. McKenzie	do	27	do	do	do	1.60	12 80	
do 15, 1887	Neil McKenzie	do	29	do	do	do	0.80	6 40	
do 15, 1887	John McKenzie	do	30	do	do	do	2.40	4 80	
do 15, 1887	Donald McNeil	do	31	do	do	do	1.10	3 00	And extra clear-
do 13, 1887	H. D. McNeil	do	32	Goose Pond	do	do	0.70	2 10	ing.
do 31, 1887	S. McNeil	do	33	do	do	do	4.50	9 00	
do 15, 1887	John McNeil	do	35	do	do	do	0.90	1 80	
do 15, 1887	J. McDougall	do	36	do	do	do	2.40	4 80	
do 17, 1887	J. H. McNeil	do	37	do	do	do	3.50	12 50	
do 17, 1887	D. McDougall	do	38	do	do	do	1.50	9 00	
do 17, 1887	D. McKenzie	do	39	do	do	do	4.50	22 50	
do 17, 1887	M. McDougall	do	40	Big Beach	do	do	4.50	3 80	
do 17, 1887	M. McDonald	do	41	do	do	do	1.90	11 70	
do 17, 1887	Neil McDonald	do	42	Goose Pond	do	do	0.80	39 80	
do 17, 1887	Neil McKinnon	do	44	Big Beach	do	do	0.60	3 60	
do 17, 1887	Joseph McKinnon	do	45	do	do	do	0.60		

[100 do 15, 1887 John McNeil

56 Mar. 9, 1887 R. O. Epis

2nd. Property purchased, damaged, or sold by the Department of Railways and Canals, &c.—Continued.

Date of Signature.	Vendors.	Purchasers.	PROPERTY PURCHASED, &c.		For what Purpose.	Area of Land.	Amount Paid.	Remarks.
			Cape Breton Railway.—Continued.					
			Lots.	District.					County.
Feb. 8, 1887	Luke Day, et al.	Her Majesty.	194	George River	Cape Breton	3.33	39 96	
do 8, 1887	A. Gillis.	do	197	do	do	6.34	19 02	
do 8, 1887	T. Dowling, et al.	do	198	do	do	8.66	86 60	
do 8, 1887	D. McDonald	do	199	do	do	1.84	9 20	
do 12, 1887	Widow E. G. Moore	do	201	Rear George River	do	2.05	12 30	
do 12, 1887	D. McQuinn	do	203	Leitch's Creek	do	6.46	38 26	
do 12, 1887	D. McDonald, et al.	do	204	do	do	6.49	37 64	
do 12, 1887	Eliza McDonald	do	206	do	do	0.43	1 29	
do 12, 1887	T. F. Moore	do	210	do	do	2.49	40 00	
do 11, 1887	M. Magrave, et al.	do	212	Pt. Pleasant	do	15.00	150 00	
do 11, 1887	Rev. R. McQuarrie	do	214	Bail's Creek	do	0.09	0 90	
do 11, 1887	Chas. Jefferson	do	213	do	do	4.34	55 12	
do 11, 1887	Peter Grant	do	215	do	do	0.82	12 30	
do 14, 1887	J. Campbell	do	217	do	do	1.87	40 76	
do 14, 1887	H. Grantmeyer	do	218	do	do	1.41	43 20	
do 14, 1887	A. Grantmeyer	do	220	North-West Arm	do	0.87	35 96	
do 14, 1887	A. Grantmeyer	do	223	do	do	3.26	19 66	
Sep. 22, 1887	J. Lewis, et al.	do	225	Bail's Creek	do	20.14	182 80	
Feb 10, 1887	J. W. Jefferson	do	228	Coxheath	do	6.39	18 87	
do 10, 1887	Eliza Jost	do	230	do	do	7.49	22 47	
do 9, 1871	do	do	234, 234a	do	do	1.56	78 12	
Sep 20, 1887	A. McKinnon, et al	do	241	Syrancy	do	1.43	25 00	
Aug 8, 1887	J. E. Burchell	do	242	Gibb's Bridge	do	0.77	30 80	
do 16, 1887	M. McFarlane	do	243	do	do	1.93	250 00	
do 16, 1887	H. McKinnon	do	20	Christmas Island	do	0.70	5 00	
Jan. 14, 1887	J. McDougall	do	28	do	do	1.50	8 41	
do 21, 1887	Ann McKenzie	do	53	Big Pond	do	1.53	4 59	
do 18, 1887	N. McLean	do	62	do	do	4.91	24 70	
do 18, 1887	J. McPhee	do	65	do	do	3.51	17 55	
do 19, 1887	S. McKinnon	do	74	Shumacdie	do	3.92	11 75	
do 19, 1887	J. and G. McNeill et al	do	82	Beaver Core	do	4.09	20 45	
do 26, 1887	H. Gillis	do	83	do	do	2.20	17 60	
do 26, 1887	D. and J. Curry	do	86	do	do	4.86	38 88	
do 26, 1887	J. McSween	do	87	do	do	3.93	19 10	
do 27, 1887	do	do						

2nd. PROPERTY purchased, damaged, or sold by the Department of Railways and Canals, &c.—Continued.

Date of Signature.	Vendors.	Purchasers	PROPERTY PURCHASED, &c		For what Purpose.	Area of Land.	Amount Paid.	Remarks.
			Cape Breton Railway.—Continued.					
			Lot.	District.				
Feb. 10, 1888	J. O'Handley.....	Her Majesty.	176	Long Island.....	Cape Breton.	0 80	8 00	
do 10, 1888	A. O'Handley.....	do	177	do	do	0 84	30 75	
do 8, 1887	W. H. Johnston.	do	189, 190	George's River.....	do	1 65	14 85	
Jan. 10, 1888	A. Grant, et al.	do	214	Balt's Creek.....	do	1 15	17 25	
Feb. 6, 1888	K. Morrison.....	do	1 H or 2	Point Tupper, Town of	Richmond ..	0 23	2,500 00	
			blk. P.	Guernsey.	do			
Apr. 7, 1888	H. and M. Dorey.....	do	6 or 3 L.	do	do	0 15	1,100 00	
Feb. 4, 1886	F. L. M. Paint.....	do	7 or 5 L.	do	do	0 23	1,100 00	
do 4, 1888	A. Embree.....	do	8, 9 or 4	do	do	0 16	78 00	
			L.					
do 4, 1888	J. McDonald.....	do	10 or 6 L.	do	do	0 15	400 00	Lightkeeper.
do 2, 1888	D. and P. Duff.....	do	11a.....	do	do	{ 0 42	{ 200 00	
Feb. 7, 1888	J. Harding.....	do	14 blk J	do	do	{ 0 23	{ 6 50	
do 6, 1888	J. Dowling.....	do	16 blk I.	do	do	0 18	150 00	
Apr. 7, 1888	V. Williams.....	do	20	S. of Head of Hawkes-	do	1 36	65 00	
				bury.				
Feb. 4, 1888	D. Morrison.....	do	21	do	do	5 16	509 00	
June 2, 1888	John Langley.....	do	22	do	do	0 28	16 00	
Feb. 4, 1888	Ias McDonald.....	do	23	Hawkesbury.....	do	2 13	500 00	
do 4, 1888	T. Langley.....	do	24	Headwaters of Hawkes-	do	1 92	200 00	
				bury.				
do 29, 1888	E. D. Tremain.....	do	25	do	do	4 09	37 16	
June 2, 1888	G. H. Grant.....	do	29	do	do	8 63	68 21	
Apr. 6, 1888	J. Johnson.....	do	30	do	do	5 01	29 06	
do 9, 1888	J. E. Smith.....	do	32	Little River Coal Mines	do	3 25	25 50	
Feb. 6, 1888	W. Philpot.....	do	33, 35	Near Richmond do	do	{ 6 92	{ 63 45	
						{ 1 95	{ 14 78	
do 6, 1888	Eliz. Baillet.....	do	37	Rear of Hawkesbury...	do	1 09	42 02	
do 7, 1888	A. O'liver.....	do	38	do	do	5 33	247 53	
do 6, 1888	D. McIntyre.....	do	39	McIntyre's Lake.....	do	19 09	2 10 50	
Oct. 8, 1888	E. T. Moseley.....	do	266	Town of Sydney.....	do	.....	*110 50	

* 1 this lot was taken in 1887, afterwards abandoned, land to be granted back to him by Government.

2nd. PROPERTY purchased, damaged, or sold by the Department of Railways and Canals, &c.—Continued.

Date of Signature.	Vendors.	Purchaser.	Property Purchased, Damaged or Sold.	For what Purpose.	Area of Land.	Amount Paid.	Remarks.		
Nov. 12, 1887	This Department to	Dept. of Interior.....	<i>Carillon Canal and Dam.</i>	Not required.....	Acres.....	\$ cts.	Order in Council		
Mar. 1, 1888	J. Fitzgerald, sen.....	Her Majesty.....		Lot 9, 1st Con. Chatham, Morrison's farm.....	Carillon Dam.....	525 00	Release.	
do 9, 1888	J. Dewar.....	do.....		Lots 2, 3, 4, 5, 6, 7, or cadastral lots 183, 185	do.....	150 00	do	
do 9, 1888	Widow C. Dewar.....	do.....		187, 189, 191, 194, 1st con Chatham (damages)	do.....	150 00	do	
May 15, 1888	T. C. Noyes.....	do.....		Lot 10, or cad. lot 201, 1st Con. do	do.....	30 00	do	
July 26, 1888	A. Robert.....	do.....		Lots 12, 13, or cadastral lots 203, 204, 1st	do.....	300 00	do	
				Con., Chatham (damages).....	do.....			
				Lot 14, or cadastral lot 205, 1st Con., Cha-	do.....			
				tham (damages).....	do.....			
				Lot 11, or cadastral lot 202, 1st Con., Cha-	do.....			
			tham (damages).....	do.....	.....			
			<i>Intercolonial Railway.</i>						
Feb. 26, 1887	Heirs L. Nadeau.....	do.....	Lots 441, 442, 443, 444, Town of Lévis, Lauzon	St. Charles Branch	1,568 1/2 feet.	5,200 00			
Apr. 12, 1887	W. C. J. Hall, et al.....	do.....	Ward.....	do.....	45,328 1/2 do.	8,000 00			
do 11, 1887	Jcs. Parm.....	do.....	Lot 473, Town of Lévis, Lauzon Ward.....	do.....	2,275 do.	4-5 00			
Feb. 28, 1887	Ed. Carrier.....	do.....	Lot 352, Village of Lauzon.....	do.....	5-54 ac.....	1,475 00			
Sep. 21, 1888	Eug. Gosselin.....	do.....	Lots 209, 210, Parish St. Joseph de Lévis.....	do.....	4 39 arpents	137 50			
Nov. 27, 1884	do.....	do.....	Lot 145, Parish St. Charles.....	do.....	0-13 do	13 00			
Aug 26, 1882	L. Leclerc.....	do.....	Lot 153 do do	do.....	1-49 do	340 00			
do 26, 1882	F. Labonté.....	do.....	Lot 157 do do	do.....	1-71 do	123 12			
do 26, 1882	J. B. Plante.....	do.....	Lot 156 do do	do.....	2-72 do	272 00			
Oct. 5, 1887	Hign Admiral.....	do.....	Land at Tuf's Cove, County of Halifax, N.S.	Dartmouth Branch	5-395 ac.....	.....		
	Carleton, City of St	do.....	Declaring their railway vested in Govt., from	I. C. Ry.....	.....	.....	Proclamation in
	Johna Branch Ry	do.....	20th Oct., 1-87.....	.....	.....	.....	Ganana Gazette
							page 861.		

2nd. PROPERTY purchased, damaged or sold by the Department of Railways and Canals, &c.—Continued.

Date of Signatures.	Vendors.	Purchasers.	PROPERTY PURCHASED, &c.		For what Purpose.	Area of Land.	Amount Paid.	Remarks.
			<i>Oxford and New Glasgow Railway—Con.</i>					
			Lots.	District.				
Dec. 17, 1887	W. Matheson	Her Majesty.	22	River John	Pictou	1.86	7 44	
do 31, 1887	J. McKeazie	do	27	do	do	0.55	4 40	
do 17, 1887	D. Ross	do	28	do	do	2.90	29 00	
do 17, 1887	A. Langill	do	29	do	do	1.56	13 48	
do 17, 1887	J. Lang	do	30	do	do	1.55	10 85	
do 17, 1887	J. Tattrie	do	30 1/2	do	do	0.93	6 51	
do 17, 1887	J. D. Langill	do	31	do	do	1.15	11 60	
do 17, 1887	F. Langill	do	32	do	do	1.24	11 40	
Feb. 3, 1888	J. S. & P. A. Langill	do	33	do	do	2.31	18 24	
Dec. 17, 1887	D. Langill	do	35	do	do	1.75	35 00	
do 17, 1887	M. Reid et al.	do	37	do	do	1.17	9 36	
do 17, 1887	F. Mitchell	do	38	do	do	2.30	11 50	
Feb. 3, 1888	J. A. Douglas	do	43	do	do	2.23	20 07	
Dec. 17, 1887	P. Grant	do	41, 47	do	do	6.66	91 84	
do 17, 1887	N. Langill	do	48	do	do	2.52	50 40	
Feb. 3, 1888	N. Bigney	do	51	do	do	4.31	60 00	
do 3, 1888	J. Sutherland	do	54	do	do	4.25	40 33	
do 3, 1888	H. Munro	do	56, 59	do	do	2.11	37 12	
do 3, 1888	W. Bigney	do	57	do	do	2.54	39 40	
do 3, 1887	D. Bigney	do	59, 61	do	do	6.79	135 80	
do 3, 1887	A. Sutherland	do	60	do	do	3.44	27 56	
do 3, 1887	A. Munro	do	61	do	do	1.06	29 61	
Jan. 6, 1888	H. McCabe	do	65, 70	do	do	2.82	29 61	
Feb. 16, 1888	H. Carter	do	1	River Philip, Oxford	Cumberland	4.09	70 38	
do 16, 1888	T. Fillmore	do	2	Oxford	do	1.38	10 34	
do 16, 1888	S. M. Henley	do	3	do	do	0.85	6 80	
do 16, 1888	Isaac Gordon	do	4	do	do	0.85	6 80	
do 16, 1888	E. Weatherhead	do	5	do	do	5.32	34 58	
do 16, 1888	A. Doncaster	do	6	do	do	1.59	12 72	
do 16, 1888	R. Thompson	do	7	do	do	1.63	12 96	
do 16, 1888	H. Thompson	do	8	do	do	0.78	6 24	
do 16, 1888	R. Thompson	do	9	do	do	1.18	9 44	
do 16, 1888	George Thompson	do	9a	do	do	0.39	3 12	
Mar. 28, 1888	W. S. McConnell	do	90	Meadowville	Pictou	4.03	85 22	

2nd. PROPERTY purchased, or damaged, or sold, by the Department of Railways and Canals, &c.—Continued.

112

Date of Signature.	Vendors.	Purchasers.	PROPERTY PURCHASED, &c.		For what Purpose.	Area of Land.	Amount Paid.	Remarks.
			<i>Oxford and New Glasgow Railway —Con.</i>					
			Lots.	District.				
Mar. 28, 1888	James McConnell ..	Her Majesty.	38, 88, 91	Back Meadows	Pictou	8.52	216 49	
do 27, 1888	D. Bigney	do	73	River John	do	3.11	15 55	
do 27, 1888	E. P. Langill	do	41, 71	do	do	0.72	28 35	
Feb 3, 1888	J. J. McDonald	do	80, 80 1/2	River John Road	do	5.64	28 20	
Mar. 28, 1888	F. Redman	do	75	River John	do	3.70	25 90	
do 27, 1888	O. McLennan	do	39, 49	do	do	2.30	60 20	
do 28, 1888	W. Clark	do	85	do	do	2.00	32 00	
do 28, 1888	W. Henry	do	76	do	do	4.80	23 04	
do 28, 1888	A. McConnell	do	87, 89	Meadowville	do	4.33	173 20	
do 26, 1887	Jas. Fraser	do	17 1/2	River John	do	0.73	3 65	
do 28, 1888	D. Clark	do	83	do	do	4.02	20 10	
Apr. 6, 1888	W. Frehill	do	133	Lyons' Brook	do	2.85	57 00	
do 9, 1888	W. Sobey	do	125	West River Road	do	2.19	37 23	
do 9, 1888	J. T. Paulin	do	138	do	do	0.94	40 00	
do 9, 1888	H. Mackenzie	do	143	do	do	1.14	32 90	
do 7, 1888	D. H. Purves	do	139	do	do	0.96	57 00	
do 7, 1888	W. McConnell	do	126	Lyons' Brook	do	0.08	33 60	
do 7, 1888	J. W. Blackie	do	127	do	do	3.20	1 60	
do 7, 1888	W. McDonald	do	124	West River Road	do	2.83	33 44	
do 7, 1888	Vary McKenzie	do	132	do	do	2.83	70 75	
do 7, 1888	T. Dunn	do	1, 1 1/2	Tatams gouche	Colchester ..	2.78	22 24	
Feb. 16, 1888	Joseph Mingo ..	do	11	do	do	2.91	14 50	
do 16, 1888	W. Forbes	do	10	do	do	16.27	200 12	
do 16, 1888	W. C. Munro	do	9	do	do	2.21	44 20	
do 16, 1888	J. W. McLeod	do	8	do	do	0.06	1 00	
do 16, 1888	F. Munro	do	7	do	do	9.54	95 40	
do 16, 1888	D. Jondrie	do	6	do	do	1.19	24 99	
do 16, 1888	J. Stevenson	do	5	do	do	2.22	25 02	
Feb. 28, 1888	J. Simmons	do	4	do	do	0.96	14 40	
do 16, 1888	W. Stevenson	do	2	do	do	0.95	19 00	
do 16, 1888	J. W. Stevenson ..	do	50	River John	Pictou	2.84	60 00	
Apr. 27, 1888	S. Bigney	do						

[1888]

2nd. PROPERTY purchased, or damaged, or sold by the Department of Railways and Canals, &c.—Continued.

Date of Signature.	Vendors.	Purchasers.	Property Purchased, or Sold, or Damaged.	For what purpose used.	Area of Land.	Amount	Remarks.	
Feb. 4, 1889	Manuel Alvez.....	Release to Her Majesty,	<i>Canadian Pacific Railway.</i>	Can. Pac. Ry.....	.....	\$	
May 14, 1887	A. H. Talbot.....	Deed to Her Majesty....		Loss of improvements at Chaurathen, Indian Reservation, Yale District, B.C.....	.....	.....	cts.	
Jan. 1, 1887	W. Carnaby.....	do		S. W. ¼ 7 and N. ½ N. W. ¼ 6, S. W. ¼ 6 and S. ½ N. W. ¼ 6, Tp. 8, R. 4 E., Pembina Branch....	do	12.00 acres...	60 00	Torrrens' certif. csts, 30th Nov., 1887 (Wm. Wallace)
do 13, 1881	J. Eccles.....	do		do	do	0.64 do ...	10 00	
do Mar. 12, 1881	A. D. Lepine.....	do		173, St. Norbert do	do	1.68 do ...	1 00	
do Dec. 10, 1887	Merchants' Bank of Canada.....	do		175 do do	do	1.68 do ...	1 00	
Nov. 24, 1887	Beatty & McKenzie..	do		N. W. ¼ and N. ½ S. W. ¼ 19, Tp. 5, R. 4 E., Pembina Branch....	do	6.00 do ...	50 00	
Dec. 13, 1887	J. D. Lafferty.....	do		S. W. ¼ and N. ½ N. W. ¼ 19, Tp. 8, R. 4 E., Pembina Branch....	do	6.00 do ...	30 00	
Oct. 4, 1887	Gavin Ross.....	do		S. E. ¼ and S. ½ N. E. ¼ 1, Tp. 8, R. 3 E., Pembina Branch....	do	6.00 do ...	48 00	
May 16 } 1887	Richard & Peters and Scottish Ont. and Mar. Land Co., Limited.....	do		N. W. ¼ 33 Tp. 1, R. 3 E., Pembina Branch....	do	4.76 do ...	23 80	
Mar. 5, 1888	Man. & N. W. Land Co., Limited.....	do		S. E. ¼ 12, Tp. 8, R. 3 E., Pembina Branch....	do	4.00 do ...	20 00	
Feb. 3, 1886	And. Hepburn.....	do		54, St. Agathe, Pembina Branch.....	do	2.60 do	41 60	And interest.
April 8, 1885	Eliz. Hepburn.....	do		S. W. ¼ 27, Tp. 3, R. 3 E., Pembina Branch....	do	5.48 do ...	40 00	
May 29, 1888	Mary Bryson.....	do		S. E. ¼ 1, Tp. 5, R. 3 E., Pembina Branch....	do	{ 4.00 do ...	72 30	Torrrens' certificate
July 18, 1888	Maria Fiammont, or L. H. Hunter.....	do		S. W. ¼ and S. ½ N. W. ¼ 19, Tp. 8, R. 4 E., Pembina Branch....	do	{ 3.23 do ...	6 00	Dufrost station.
June 25, 1868	H. T. Champion.....	do	S. E. ¼ and L. S. 10 of Sec. 19, Tp. 6, R. 3 E., Pembina Branch....	do	6.00 do ...	30 00	Torrrens' certificate	
Oct. 4, 1888	W. L. Watt.....	do	Pembina Branch.....	do	5.00 do ...	26 00	do	

Aug. 15, 1888	Man. Mortgage and Investment Co., Limited	do	30 and 32 Ste. Agathe, Pembina Branch.....	do	.....	{ 3.56 do } { 3.56 do }	206 80
do 10, 1887	C. D. Crawford	Release to Her Majesty	<i>Trent Valley Canal.</i>				
do 8, 1887	A. W. Robson	do	Lakefield Village, lots 5, 6, plan 21, or lot 26, 8th Con., Smith, damaged by Lakefield dam	Trent Navigation	.....		75 00
do 2, 1887	R. Tully	do	Lot 4, plan 2, or lot 7, 8th Con., Smith, damaged by Lakefield dam	do	.....		25 00
do 15, 1887	J. O. Garveth	do	1, 2, 3, 5, George st., 13, 14, 15, N. Smith st., or pt. 27, 8th Con., Smith, damaged by Lakefield dam	do	.....		100 00
do 29, 1887	Geo. Cochrane	do	13, 14, subd. of S. E. ½ 26, 8th Con., Smith, damaged by Lakefield dam	do	.....		120 00
do 13, 1887	J. Isbester	do	2, 3, S. Smith st., 14, 15 N., Concession st., or pt. 27, 8th Con., Smith, damaged by Lakefield dam	do	.....		40 00
do 30, 1887	A. Miller	do	Blocks 11, 12, sub. of 26, 8th c., Smith, damaged by Lakefield dam	do	.....		250 00
do 6, 1887	T. Harrington	do	Lot 31 in 10th Con., Smith, damaged by Lakefield dam	do	.....		100 00
do 8, 1887	Silas Cox	do	Lot 13, 11th Con., Smith, damages by Lakefield dam	do	.....		100 00
do 10, 1887	J. M. Dinwoodie	do	Lot 3, 4, on plan 21, Lakefield Village, or pt. 26, 8th Con., Smith, damages by Lakefield dam	do	.....		160 00
do 14, 1887	J. L. Simpson et al.	do	Lot 3, Burham st., Lakefield Village, or pt. 26 or 17 in 8th Con., Douro, damages by Lakefield dam	do	.....		100 00
do 16, 1887	M. Phelan	do	Park lot 1 of 27, in 8th Con., Smith, damages by Lakefield dam	do	.....		400 00
Aug. 15, 1887	A. Wilson	do	Subd. 7 of 26, in 8th Con., Smith, damages by Lakefield dam	do	.....		25 00
Sept. 23, 1887	H. W. Pearson	do	N. ½ and S. W. ¼ 23, in 5th Con., Douro, damages by Lakefield dam	do	.....		150 00
do 28, 1887	{ J. Young (owner) } { W. Pope (lessee) }	do	Block 11 of S. E. ¼ 26, in 8th Con., Smith, damages by Lakefield dam	do	.....		150 00
do 19, 1887	Jane Glarne et al.	do	Lot 36 in 12th Con., Smith, damages by Lakefield dam	do	.....		50 00
Oct. 7, 1887	D. Smith	do	Lot 1 S. Smith st., 13 N. of 8th Con. S., Lakefield, in Smith, damages by Lakefield dam	do	.....		100 00
do 6, 1887	J. P. Strickland	do	Subd. 8, 2, of plan 21, Lakefield, or pt. S. E. ¼ 26, 8th Con., Smith, damages by Lakefield dam	do	.....		360 00
		do	Lots 5, S. George st., 9, N. Smith st., plan 5, Lakefield, damages by Lakefield dam	do	.....		150 00

[1888]

178

2nd. PROPERTY purchased, or damaged, or sold by the Department of Railways and Canals, &c.—Continued.

Date of Signature.	Vendors.	Purchasers.	Property Purchased, Sold or Damaged.	For what purpose used	Area of Land.	Amount.	Remarks.
Oct. 31, 1887	J. Hull.....	Her Majesty.	<i>Trent Valley Canal—Continued.</i> Lot 3, in 4th Con., Burleigh, damages by Young's Point dam.....	Frent Navigation.	Acres.	\$ cts. 1,200 00	And steam saw-mill, &c.
Nov. 14, 1887	Corporation Lakefield Village.....	do	Damage to roads, &c., in village, by Lakefield dam.....	do	.....	600 00	
do 16, 1887	J. O. Sherin.....	do	Park lot, W. ½ 2, N. George st., Lakefield, damages by Lakefield dam.....	do	.....	100 00	
do 22, 1887	T. Gordon.....	do	Park lot, W. ½ 2, N. George st. Lakefield, damages by Lakefield dam.....	do	.....	100 00	
Dec. 9, 1887	J. Edwards	do	S. bd. 15, 16, plan 21, Lakefield, damages by Lakefield dam.....	do	.....	50 00	
do 3, 1887	Geo. Johnson.....	do	E. ½ 26, in 7th Con. Smith, Lakefield, damages by Lakefield dam.....	do	.....	40 00	
do 5, 1887	Cath. P. Traill.....	do	3, N. of Clements st., Lakefield, damages by Lakefield dam.....	do	.....	50 00	
do 19, 1887	R. C. & G. W. R Strickland.....	do	7 in 2nd, 8 in 4th and 8th in 5th Con., Harvey, damages by Burleigh Falls dam.....	do	.....	750 00	
Feb. 14, 1888	Trustees of Methodist Church at Lakefield.....	do	5, E. of Water st. or pt. 17 in 8th, Douro, damages by Lakefield dam.....	do	.....	300 00	
do 3, 1888	R. Carter et al.....	do	1, Crescent, Lakefield, or pt. 17 in 8th, Douro, damages by Lakefield dam.....	do	.....	50 00	
Apr. 28, 1888	Eliz. Chalmers et al	do	37 in 12th Con. Smith, damages by Young's Point dam.....	do	.....	125 00	
May 1, 1888	J. Griffin et al.....	do	Park lot 1, Lakefield, 27 in 8th, Smith, damages by Lakefield dam.....	do	.....	250 00	
do 8, 1888	Indian Department...	O. O. to Her Majesty....	Islands 20, 21, 30, 30a, above Burleigh Falls.	do	.....	300 00	Transferred to this Dept. by O. O.
do 22, 1888	F. P. Young.....	Release to Her Majesty.	38 in 12th Con., Smith, damages by Young's Point dam.....	do	.....	250 00	

Date	Party	Deed to Her Majesty	Tay Canal	Amount	Notes
Dec. 3, 1887	A. McLaren	do	Tay Canal	1,100 00	And flood part lots 24, 25. (Receipt for interest, \$79.75, Aug 13, 1888)
Aug. 11, 1888	R. E. Matheson	do	do	500 00	
<i>Williamsburgh Canal.</i>					
Apr. 28, 1887	T. Perry	Release to Her Majesty	Galops Canal	35 00	
do 28, 1887	G. Anderson	do	do	35 00	Damages to W. 1/2 lot 13, 1st Con, Edwardsburgh, running ranges
do 28, 1887	J. Driver	do	do	35 00	Damages to E. 1/2 lot 14, 1st Con, Edwardsburgh, running ranges
do 28, 1887	G. Bolton	do	do	100 00	Damages to W. 1/2 lot 14, 1st Con, Edwardsburgh, running ranges
<i>Welland Canal.</i>					
Oct. 21, 1887	W. H. Bell	Release to Her Majesty	Damages by removal of bridge	250 00	Lot 213, Thorold
do	G. Thompson	do	do	150 00	Lot 213 do
do	M. McAniff	do	do	100 00	Lots 2, 3, south Main St, Port Robinson
do	Mrs W. Houston et al	do	do	25 00	Raising Niagara St, St. Catharines, &c.
do	R. Harcourt	do	do	100 00	Block C, Welland, and lots L N M, or 27 in 5th Con, Crowland
do	Widow of John McRae et al	do	do	100 00	Loss of business on lot B (27 in 1st Con, Humberstone)
do 19, 1887	Eliz. Walters et al	do	Obstructing East St., Pt. Colborne	480 00	W. pt. 11, W. of Orse St., Town of Cayuga
do	W. Snider et al	do	Dunnville Dam	67 00	W. 1/2 12, Dochstader tract, Canborough
do	Security Loan and Savings Co., St. Catharines	do	do	107 00	do
do	A. J. Burke (fawcett et al)	do	do	1 00	do
do	E. Lyburner et al	do	do	251 00	Lots 8, 9 do
do	A. S. Gill, et al	do	do	60 00	Lot E, 1/2 12 do
do	W. McConnell	do	do	100 00	Lot E, pt. 2, Jones tract, N. Cayuga
do	W. A. Chrysler et al	do	do	15 00	Lots 30, 31, 2nd Con., Cayuga
do	R. Walker et al	do	do	180 00	Lot 7, Jones' tract do
do	W. H. Merritt et al	do	do	650 00	Lots pts. 31, 32, 33, 2nd Con., Cayuga
do	Estate W. O. Keslar	do	do	75 00	Lots 1, 2, Huff tract, Cayuga
do	New England Co.	do	do	150 00	Lot pt. 6, 2nd Con, Dunn
do	O. & J. Smith	do	do	193 00	Lot 13, Jones' tract, N. Cayuga
do		do	do		Lot 1 do
do		do	do		Lot 4, Dochstader tract, Canborough

Alabastine, &c.

2nd. PROPERTY purchased, damaged or sold by the Department of Railways and Canals, &c.—Continued.

Date of Signature.	Vendors.	Purchaser.	Property Purchased, Damaged or Sold.	For what Purpose.	Area of Land.	Amount Paid.	Remarks.
Jan. 4, 1888	H. E. Kennedy.....	Deed to Her Majesty....	<i>Wellan's Canal—Continued.</i>				
do 4, 1888	do	Release	Lots 21, 22, in 1st Con., Grantham	Canal enlargement	0.41	500 00	
do 21, 1888	Ham & Matthews.....	do ...	Damages to lots 21, 22, in 1st Con., 21 in 2nd Con., Grantham.....	do .....	.....	.....
do 21, 1888	John Matthews.....	do ...	Loss of business on Lot A, east of East St., Port Colborne.....	do .....	.....	1,000 00	
do 3, 1888	S. & C. McNeal.....	do ...	Damage to buildings on lot A, east of East St., Port Colborne.....	do .....	.....	125 00	
do 3, 1888	U. McNeal (tenant).....	do ...	Damage to buildings on Lot 2, N. Frazer St., Port Colborne.....	do .....	.....	295 00	
Mar. 8, 1888	E. McMahon.....	do ...	Damage to Railway Hotel, on lots 3, 4, N. Frazer St., Port Colborne	do .....	.....	250 00	
Apl. 19, 1888	Cath. Morrison	do ...	Damage to lots 23 in 1st Con., 23 in 2nd Con., Grantham, and 1 in front of 1st Con. south	do .....	.....	{ 485 00	
June 29, 1888	Widow of Bishop J. B. Fuller	do ...	Damage to lot C, East St., Port Colborne.....	do .....	.....	{ 44 00	
July 27, 1888	Calvin & Son.....	do ...	do do A, Donaldson, subd. of 14 in 5th, Grantham.....	do .....	.....	285 00	
Apl. 28, 1888	W. Anderson et al.....	do ...	Damage to schooner "Bavaria," and by str. "Prussia," to lock gates.....	do .....	.....	150 00	
May 12, 1888	H. N. Misener.....	do ...	Damage to lot S. 4 5, in 2nd Con., Dunn.....	Dunnville Dam.....	.....	1,000 00	Matual release.
Mar. 6, 1888	E. Beamsley.....	do ...	do do lots 6, 8, Dochstader tract, Can- borough.....	do .....	.....	115 00	
		do ...	Damage to S. pt. 5, Dochstader tract, Can- borough.....	do .....	.....	85 00	

AGREEMENTS

Respecting Subsidies granted by the Dominion Government to aid in the construction of Railways, entered into by certain Railway Companies with the Minister of Railways and Canals, during the Fiscal Year ended 30th June, 1888.

3rd. AGREEMENTS respecting subsidies granted by the Dominion Government to
with the Minister of Railways and Canals, during

Date of Signature.	Name of Railway Company.	Line of Railway to be Constructed.	Acts of Canada Granting Subsidy.	Amount of Subsidy.	
				Per Mile.	Not exceeding in the whole
1887.				\$	\$
Aug 19	Great Northern Railway Co.	From New Glasgow to Montcalm.....	49 Vic., c. 10.	3,200	57,800
Sept. 12	Great North-West Central Railway Co.	From Brandon to Battleford (land subsidy).	49 Vic., c. 11.	6,400 acres per mile.	..... ..
1888.					
June 6	Montreal and Western Railway Co.	From St. Jérôme to Lachute aux Iroquois (in lieu of subsidies granted by 46 Vic., c. 25, and 47 Vic., c. 8).	49 Vic., c. 10.	5,161	361,270
do 27	Lake Temiscamingue Colonization Railway Co.	From Long Sault to Lake Kippewa, and at Rapida Micharge, La Cave, Les Erables, La Montague—wharves, etc., (in lieu of 48-49 Vic., c. 59, and 49 Vic., c. 10).	50-51 Vic., c. 24.	3,200	33,600 12,400
1887.					
Oct. 12	Dominion Lime Co...	From 3rd to 6th ranges, Dudswell	50-51 Vic., c. 24.	3,200	22,400
do 3	Harvey Branch Railway Co.	From Albert Railway southern terminus to Harvey Bank, N.B.	50-51 Vic., c. 24.	3,200	9,600
do 13	Joggins Railway Co.	From end of part subsidized by 49 Vic., c. 10, to wharves, Cumberland Basin, N.S.	50-51 Vic., c. 24.	3,200	4,000
Sept. 29	Montreal and Lake Maskinongé Railway Co.	From St. Felix de Valois to St. Gabriel de Brandon.	49 Vic., c. 10.	3,200	32,000
Nov. 5	Guelph Junction Railway Co.	From Campbellville to Guelph.....	50-51 Vic., c. 24.	3,200	51,200
do 21	Beauharnois Junction Railway Co.	From Ste. Martine to Valleyfield.....	50-51 Vic., c. 24.	3,200	96,000
Oct. 17	Nova Scotia Central Railway Co.	From Lunenburg to New Germany, and branch to Bridgewater Railway wharf.	50-51 Vic., c. 24.	3,200	108,800
1888.					
Jan. 25	Montreal and Champlain Junction Railway Co.	From Salmon River, at Fort Covington, to Massena Springs.	50-51 Vic., c. 24.	..... ..	64,000
1887.					
Oct. 12	Fredericton and St. Mary's Railway Bridge Co.	Bridge over River St. John, Fredericton to St. Mary's.	50-51 Vic., c. 26.	..... ..	300,000
Dec. 1	Drummond County Railway Co.	From Drummondville to south-west branch River Nicolet.	50-51 Vic., c. 24.	3,200	96,000
do 12	Belleville and North Hastings Railway Co.	From Madoc to Eldorado	48-49 Vic., c. 59, 49 Vic., c. 10.	1,500 1,700	10,500 11,900
1888.					
Mar. 31	Hereford Branch Railway Co.	From International Railway, at Eaton, to Hereford.	49 Vic., c. 10.	3,200	108,800
do 26	Minudie Railway Co. (Limited)	From Joggins Railway, at River Hebert railway bridge, to Minudie.	50-51 Vic., c. 24.	3,200	17,600
Apr. 12	Cumberland Railway and Coal Co.	From Spring Hill to Oxford and New Glasgow Railway.	50-51 Vic., c. 24.	3,200	44,800
Mar. 16	Great Eastern Railway Co.	From River St. Francis, at Pierreville, to St. Gregoire Station.	50-51 Vic., c. 24.	3,200	96,000

aid in the construction of Railways, entered into by certain Railway Companies the Fiscal Year ended 30th June, 1888.

Number of Miles to be Subsidized.	Maximum Grade, Feet per Mile.	Radius of Curvature, not less than—	Width of clearing each side.	Width of Cuttings.	Embankments.	Steel Rails, lbs. per lineal yard.	When to be Completed.	Remarks.
No.	Feet.	Feet.	Ft.	Ft.	Ft.	Lbs.		
18	53	1,433	50	20	16	56	Aug. 1, 1890	
450	60	933	50	20	14	56	Jan. 1, 1888 do 1, 1889 do 1, 1890 do 1, 1891	50 miles. 100 do 150 do 150 do
70	80 with exceptions.	638 with exceptions.	50	20	15	56	Aug. 1, 1890	
9½ 2	106 105	637 and exceptions.	50	14	10	30	do 1, 1889	
4½ 100	108	955	50	20	16	56	June 30, 1888	
3	80	955	50	20	16	56	do 30, 1888	
1½	108	477	50	20	16	56	do 30, 1888	
10	53	1,146	50	20	16	56	Dec. 1, 1888	
16	53	1,910 and exceptions.	50	22	13	56	Jan. 1, 1889	
20	38	1,146	50	20	16	56	Oct. 1, 1889	
34	80	882	50	20	16	56	Dec. 31, 1889	
21½	36	1,146	50	20	16	56	Aug. 1, 1891	
			66	22	17		May 1, 1890	
12½	{ 63 80 }	1,433 with exceptions.	50	20	16	56	Aug. 1, 1891	O.C. for 80 feet gradient, at Drummondville.
6½ 100	106	819	50	20	16	56	Dec. 1, 1888	
34	66	933	50	20	15	56	Aug 1, 1890	
5½	{ 53 66 }	933	50	20	15	56	March 1, 1889	
14	106	955	50	20	15	56	Aug. 1, 1891	
21½	27	3,830	50	20	15	56	March 1, 1889	

3rd. AGREEMENTS respecting subsidies granted by the Dominion

Date of Signature.	Name of Railway Company.	Line of Railway to be Constructed.	Acts of Canada Granting Subsidy.	Amount of Subsidy.	
				Per Mile.	Not exceeding in the whole
1888.				\$	\$
Apr. 6	Lake Erie, Essex and Detroit River Railway Co.	From Walkerville to Cedar Creek Station.	50-51 Vic., c. 24.	.....	118,400
May 28	Cornwallis Valley Railway Co.	From Kentville to Kingsport.....	50-51 Vic., c. 24.	3,200	41,600
Mar. 5	St. Catharines and Niagara Central Railway Co.	From St. Catharines to Niagara River bridge.	50-51 Vic., c. 24.	3,200	38,400
June 25	St John Valley and Rivière du Loup Railway Co.	From Fredericton towards Woodstock	49 Vic., c. 10, 50-51 Vic., c. 24.	3,200 3,200	70,400 70,400

NOTE.—June 2, 1888, Baie des Chaleurs Ry. Co., to apply \$96,000 to the 30 miles from 40th to 70th miles, subject to approval of Parliament. 49 Vic., c. 17, extends time for completion of the 100 miles to 1st Dec., 1888.

OTTAWA, 9th November, 1888.

Government to aid the construction of Railways, &c.—*Concluded.*

Number of Miles to be Subsidized.	Maximum Grade, Feet per Mile.	Radius of Curvature, not less than—	Width of clearing each side.	Width of Cuttings.	Embankments.	Steel Rails, lbs. per lineal yard.	When to be Completed.	Remarks.
No.	Feet.	Feet.	Ft.	Ft.	Ft.	Lbs.		
27	40	1,433	50	20	15	56	July 1, 1889	
13	{ 53 70 }	955	50	20	15	56	do 1, 1889	
12	85	{ 955 716 }	50	20	15	56	Aug. 1, 1888	O. C. for 716 feet curvature.
} 44	70	955	50	20	15	56	July 31, 1890	

H. A. FISSIAULT.

APPENDIX No. 23.

ALPHABETICAL List of Railways Subsidized by the Dominion Government.

A.D	Designation of Act.	APPROPRIATION OF GRANT WITH DESCRIPTION OF LINE SUBSIDIZED.	CONDITIONS OF GRANT UNDER THE SUBSIDY ACTS.					
			Rate per Mile. Money and Land.	Estimated Number of Miles.	If per Mile.		If for a term of years.	
					\$	Total for the whole work not to exceed—	Amount and duration of instalments.	Total Subsidy.
				\$	Money.	Land.	Acres.	
1887	60-51 Vic., c. 23	Alberta and Athabasca Ry. Co, Bow River on C.P.R., between Calgary and Crowfoot, to point near Town Plot of Edmonton.	6,400 acres	300		15,000		1,920,000
1886	49 Vic., c. 10	Albert Ry. Co, Salisbury to Hopewell.			64,000	14,665		
1883	51 Vic., c. 3	do iron rails, 726 tons.		20		64,000		
1883	48-19 Vic., c. 59.	For a line, Annapolis to Digby.		40		128,000		128,000
1885	48-49 Vic., c. 59 }	Brockville, Westport and Sault Ste. Marie Ry. Co, Brockville to Westport		7		10,500		
1887	49 Vic., c. 10 }	Belleville and North Hastings Ry. Co, Madoc to Eldorado		20		11,900		
1887	50-51 Vic., c. 24	Beauharnois Junction Ry. Co, St. Martin's towards St. Amicet				96,000		22,400
1887	50-51 Vic., c. 24.	Brantford, Waterloo and Lake Erie Ry. Co, Brantford to Hagersville or Waterford or some intermediate point on Canada Southern Railway						93,000
1886	49 Vic., c. 10	Buctouche and Moncton Ry. Co, Moncton to Buctouche.		18		57,600		57,600
1887	50-51 Vic., c. 24.	do do from W. end of section subsidized to Moncton.		30		96,000		96,000
1874	37 Vic., c. 14	Canada Central Ry, Pembroke to Callander.		2		6,400		6,400
1883	46 Vic., c. 26	Carquet Ry. Co, Bathurst to Carquet.		120		1,440,000		1,440,000
1887	47 Vic., c. 8	do Carquet to Shippegan Harbor.		36		115,200		115,200
1887	50-51 Vic., c. 24.	do Lower Carquet to Shippegan.		24		76,800		76,800
1883	51 Vic., c. 3	do iron rails, 4,062 tons.		7		32,000		32,000
1883	48-49 Vic., c. 59.	Central Ontario Ry. Co, Cooe Hill or Rathburn to Bancroft.		20		64,000		64,000

Year	Company	Capital	Shares	Value	Notes	Interest	Dividend	Land on Vancouver Island (see 47 V, c. 6)
1885	Canada Atlantic Ry. Co.	1,600,000	34,000	96,000	Valleyfield to Lacolle		96,000	
1886	do	3,200	10	38,400	Terminus, Ottawa, to Chaudiers Falls		38,400	
1887	Canadian Pacific Ry. Co.	3,200	12	38,400	Clarke's Island to Valleyfield		38,400	
1888	do	3,200	12	38,400	Lacolle to International Boundary		38,400	
1889	do	3,200	12	38,400	Callander to Port Arthur, and Selkirk to Kamloops		38,400	
1884	For extension of C. P. R.	6,000	180	560,000	St. Martin's Junction to Quebec		560,000	
1885	do	3,200	12	38,400	do (additional)		38,400	
1886	do	3,200	13	41,600	Connecting Jacques Cartier Union Junction with North Shore		41,600	
1887	do	3,200	14	44,800	Carillon and Grenville Ry. Co., St. Eustache to Sault-au-Récollet		44,800	
1888	do	3,200	12	38,400	Cornwallis Valley Ry. Co., Kentville to Kingsport		38,400	
1889	do	3,200	12	38,400	Cornwallis Valley Ry. Co., Kentville to Kingsport		38,400	
1884	do	3,200	14	44,800	Uxford Village		44,800	
1885	do	3,200	12	38,400	Cap Rouge and St. Lawrence Ry. Co., Lorette to Quebec		38,400	
1886	do	3,200	12	38,400	Chatham Branch Ry., iron rails, 488 tons		38,400	
1887	do	3,200	12	38,400	Chatham Branch Ry., iron rails, 488 tons		38,400	
1888	do	3,200	12	38,400	Chatham Branch Ry., iron rails, 488 tons		38,400	
1889	do	3,200	12	38,400	Chatham Branch Ry., iron rails, 488 tons		38,400	
1884	Chignecto Marine Transport Ry. Co.	3,200	30	96,000	Ship Railway—Gulf of St. Lawrence to Bay of Fundy		96,000	
1885	do	3,200	30	96,000	Ship Railway—Gulf of St. Lawrence to Bay of Fundy		96,000	
1886	do	3,200	30	96,000	Ship Railway—Gulf of St. Lawrence to Bay of Fundy		96,000	
1887	do	3,200	30	96,000	Ship Railway—Gulf of St. Lawrence to Bay of Fundy		96,000	
1888	do	3,200	30	96,000	Ship Railway—Gulf of St. Lawrence to Bay of Fundy		96,000	
1889	do	3,200	30	96,000	Ship Railway—Gulf of St. Lawrence to Bay of Fundy		96,000	
1884	Drummond County Ry. Co.	3,200	30	96,000	Drummondville towards Nicolet		96,000	
1885	do	3,200	30	96,000	Drummondville towards Nicolet		96,000	
1886	do	3,200	30	96,000	Drummondville towards Nicolet		96,000	
1887	do	3,200	30	96,000	Drummondville towards Nicolet		96,000	
1888	do	3,200	30	96,000	Drummondville towards Nicolet		96,000	
1889	do	3,200	30	96,000	Drummondville towards Nicolet		96,000	
1884	Dominion Lime Co.	3,200	7	22,400	from point on Quebec Central Ry. to Dudswell Lime Co.'s Quarries		22,400	
1885	do	3,200	7	22,400	from point on Quebec Central Ry. to Dudswell Lime Co.'s Quarries		22,400	
1886	do	3,200	7	22,400	from point on Quebec Central Ry. to Dudswell Lime Co.'s Quarries		22,400	
1887	do	3,200	7	22,400	from point on Quebec Central Ry. to Dudswell Lime Co.'s Quarries		22,400	
1888	do	3,200	7	22,400	from point on Quebec Central Ry. to Dudswell Lime Co.'s Quarries		22,400	
1889	do	3,200	7	22,400	from point on Quebec Central Ry. to Dudswell Lime Co.'s Quarries		22,400	
1884	Dudswell Lime Co.	3,200	7	22,400	Quarries		22,400	
1885	do	3,200	7	22,400	Quarries		22,400	
1886	do	3,200	7	22,400	Quarries		22,400	
1887	do	3,200	7	22,400	Quarries		22,400	
1888	do	3,200	7	22,400	Quarries		22,400	
1889	do	3,200	7	22,400	Quarries		22,400	
1884	Esquimalt and Nanaimo Ry. Co.	3,200	71	228,000	Esquimalt to Nanaimo, Vancouver's Island		228,000	
1885	do	3,200	71	228,000	Esquimalt to Nanaimo, Vancouver's Island		228,000	
1886	do	3,200	71	228,000	Esquimalt to Nanaimo, Vancouver's Island		228,000	
1887	do	3,200	71	228,000	Esquimalt to Nanaimo, Vancouver's Island		228,000	
1888	do	3,200	71	228,000	Esquimalt to Nanaimo, Vancouver's Island		228,000	
1889	do	3,200	71	228,000	Esquimalt to Nanaimo, Vancouver's Island		228,000	
1884	Erie and Huron Ry. Co.	3,200	30	96,000	Wallaceburg to Sarnia		96,000	
1885	do	3,200	30	96,000	Wallaceburg to Sarnia		96,000	
1886	do	3,200	30	96,000	Wallaceburg to Sarnia		96,000	
1887	do	3,200	30	96,000	Wallaceburg to Sarnia		96,000	
1888	do	3,200	30	96,000	Wallaceburg to Sarnia		96,000	
1889	do	3,200	30	96,000	Wallaceburg to Sarnia		96,000	
1884	Elgin, Petricodiac and Havelock Ry. Co.	3,200	13	38,400	Petricodiac to Havelock Corner		38,400	
1885	do	3,200	13	38,400	Petricodiac to Havelock Corner		38,400	
1886	do	3,200	13	38,400	Petricodiac to Havelock Corner		38,400	
1887	do	3,200	13	38,400	Petricodiac to Havelock Corner		38,400	
1888	do	3,200	13	38,400	Petricodiac to Havelock Corner		38,400	
1889	do	3,200	13	38,400	Petricodiac to Havelock Corner		38,400	
1884	Fredrickton and St. Mary's Bridge Ry. Co.	3,200	17	54,400	iron rails, 2,201 tons		54,400	
1885	do	3,200	17	54,400	iron rails, 2,201 tons		54,400	
1886	do	3,200	17	54,400	iron rails, 2,201 tons		54,400	
1887	do	3,200	17	54,400	iron rails, 2,201 tons		54,400	
1888	do	3,200	17	54,400	iron rails, 2,201 tons		54,400	
1889	do	3,200	17	54,400	iron rails, 2,201 tons		54,400	
1884	Ganacque, Perth and St. James' Bay Ry. Co.	3,200	17	54,400			54,400	
1885	do	3,200	17	54,400			54,400	
1886	do	3,200	17	54,400			54,400	
1887	do	3,200	17	54,400			54,400	
1888	do	3,200	17	54,400			54,400	
1889	do	3,200	17	54,400			54,400	
1884	Gatineau Valley Ry. Co.	5,193	62	320,000	Hull towards Le Désert		320,000	
1885	do	5,193	62	320,000	Hull towards Le Désert		320,000	
1886	do	5,193	62	320,000	Hull towards Le Désert		320,000	
1887	do	5,193	62	320,000	Hull towards Le Désert		320,000	
1888	do	5,193	62	320,000	Hull towards Le Désert		320,000	
1889	do	5,193	62	320,000	Hull towards Le Désert		320,000	
1884	Great Northern Ry. Co.	3,200	10	32,000	St. Jérôme to new Glasgow		32,000	
1885	do	3,200	10	32,000	St. Jérôme to new Glasgow		32,000	
1886	do	3,200	10	32,000	St. Jérôme to new Glasgow		32,000	
1887	do	3,200	10	32,000	St. Jérôme to new Glasgow		32,000	
1888	do	3,200	10	32,000	St. Jérôme to new Glasgow		32,000	
1889	do	3,200	10	32,000	St. Jérôme to new Glasgow		32,000	
1884	Great Eastern Ry. Co.	3,200	10	32,000	Yamaska to River St. Francis		32,000	
1885	do	3,200	10	32,000	Yamaska to River St. Francis		32,000	
1886	do	3,200	10	32,000	Yamaska to River St. Francis		32,000	
1887	do	3,200	10	32,000	Yamaska to River St. Francis		32,000	
1888	do	3,200	10	32,000	Yamaska to River St. Francis		32,000	
1889	do	3,200	10	32,000	Yamaska to River St. Francis		32,000	
1884	do	6,400 acres	450	51,200	St. Francis to St. Grégoire		51,200	
1885	do	6,400 acres	450	51,200	St. Francis to St. Grégoire		51,200	
1886	do	6,400 acres	450	51,200	St. Francis to St. Grégoire		51,200	
1887	do	6,400 acres	450	51,200	St. Francis to St. Grégoire		51,200	
1888	do	6,400 acres	450	51,200	St. Francis to St. Grégoire		51,200	
1889	do	6,400 acres	450	51,200	St. Francis to St. Grégoire		51,200	
1884	Great North-West Central Ry. Co.	3,200	3	9,600	Brandon to Battleford		9,600	
1885	do	3,200	3	9,600	Brandon to Battleford		9,600	
1886	do	3,200	3	9,600	Brandon to Battleford		9,600	
1887	do	3,200	3	9,600	Brandon to Battleford		9,600	
1888	do	3,200	3	9,600	Brandon to Battleford		9,600	
1889	do	3,200	3	9,600	Brandon to Battleford		9,600	
1884	Guelph Junction Ry. Co.	3,200	34	108,800	from Junction with O.P.R. to Guelph		108,800	
1885	do	3,200	34	108,800	from Junction with O.P.R. to Guelph		108,800	
1886	do	3,200	34	108,800	from Junction with O.P.R. to Guelph		108,800	
1887	do	3,200	34	108,800	from Junction with O.P.R. to Guelph		108,800	
1888	do	3,200	34	108,800	from Junction with O.P.R. to Guelph		108,800	
1889	do	3,200	34	108,800	from Junction with O.P.R. to Guelph		108,800	
1884	Harvey Branch Ry. Co.	3,200	49	156,800	from Southern Terminus of Albert Ry. to Harvey Bank		156,800	
1885	do	3,200	49	156,800	from Southern Terminus of Albert Ry. to Harvey Bank		156,800	
1886	do	3,200	49	156,800	from Southern Terminus of Albert Ry. to Harvey Bank		156,800	
1887	do	3,200	49	156,800	from Southern Terminus of Albert Ry. to Harvey Bank		156,800	
1888	do	3,200	49	156,800	from Southern Terminus of Albert Ry. to Harvey Bank		156,800	
1889	do	3,200	49	156,800	from Southern Terminus of Albert Ry. to Harvey Bank		156,800	
1884	Harvey Branch Ry. Co.	3,200	49	156,800	from Southern Terminus of Albert Ry. to Harvey Bank		156,800	
1885	do	3,200	49	156,800	from Southern Terminus of Albert Ry. to Harvey Bank		156,800	
1886	do	3,200	49	156,800	from Southern Terminus of Albert Ry. to Harvey Bank		156,800	
1887	do	3,200	49	156,800	from Southern Terminus of Albert Ry. to Harvey Bank		156,800	
1888	do	3,200	49	156,800	from Southern Terminus of Albert Ry. to Harvey Bank		156,800	
1889	do	3,200	49	156,800	from Southern Terminus of Albert Ry. to Harvey Bank		156,800	
1884	International Ry. Co.	3,200	49	156,800	Sherbrooke to International Boundary		156,800	
1885	do	3,200	49	156,800	Sherbrooke to International Boundary		156,800	
1886	do	3,200	49	156,800	Sherbrooke to International Boundary		156,800	
1887	do	3,200	49	156,800	Sherbrooke to International Boundary		156,800	
1888	do	3,200	49	156,800	Sherbrooke to International Boundary		156,800	
1889	do	3,200	49	156,800	Sherbrooke to International Boundary		156,800	

ALPHABETICAL LIST of Railways Subsidized by the Dominion Government.—Continued.

A. D.	Designation of Act.	APPROPRIATION OF GRANT WITH DESCRIPTION OF LINE SUBSIDIZED.	CONDITION OF GRANT UNDER THE SUBSIDY ACTS.					
			Rate per Mile. Money and Land.	Estimated Number of Miles.	If per mile. Total for the whole work not to exceed—	If for a term of years. Amount and duration of instalments.	Total Subsidy. Money.	Land.
			\$		\$	\$	\$	A. cres.
1884	47 Vic, c 8 ...	International Ry. Co., Montreal to Harbors of St. Andrews, St. John and Halifax .....	.....	351	.....	{ \$70,000 for 15 yrs., \$30,000 for 20 yrs, or \$250,000 p.an. for 20 yrs.....	.....	.....
1885	48-49 Vic, c. 58	.....	.....	.....	.....	.....	.....	.....
1884	47 Vic, c. 8.....	Intercolonial Ry., Branch of, Derby Station to Indian town. ....	.....	14	140,000	.....	140,000	.....
1886	49 Vic, c. 10	Joggins Ry. Co., McCann Station to Joggins	3,200	12	38,400	.....	38,400	.....
1887	50-51 Vic, c. 24.	do from S. end to the Wharves	3,200	1 1/2	4,000	.....	4,000	.....
1887	50-51 Vic, c. 24.	Jacques Cartier Union Ry. Co., to extend and complete the line	.....	.....	20,000	.....	20,000	.....
1888	51 Vic, c. 3.....	Kent Northern Ry., iron rails 2,549 tons .....	.....	.....	.....	.....	68,334	.....
1884	47 Vic, c. 8.....	Kingston and Pembroke Ry. Co., Mississippi to Renfrew	3,200	15	48,000	.....	48,000	.....
1886	49 Vic, c. 10 ...	L'Assomption Ry. Co., L'Assomption to L'Epiphane	3,200	3 1/2	11,200	.....	11,200	.....
1887	50-51 Vic, c. 24.	Lake Erie, Essex and Detroit River Ry. Co. ....	.....	27	118,400	.....	118,400	.....
1885	48-49 Vic, c. 59	Lake Temiscamingue Colonization Ry. Co., Long Sault to Lake Temiscamingue .....	.....	8	25,600	.....	25,600	.....
1887	50-51 Vic, c. 24	do do to overcome rapids of the Ottawa River, at La Micharge, La Cave Les Erables and La Montagne, and for construction of Wharves and Landings at such Rapids .....	.....	2	12,400	.....	12,400	.....
1887	50-51 Vic, c. 24.	do do Long Sault to Lake Kippewa .....	.....	10 1/2	33,600	.....	33,600	.....
1885	48-49 Vic, c. 59.	Leamington and St. Clair Ry. Co., Comber to Lake Erie	3,200	14	44,800	.....	44,800	.....
1887	50-51 Vic, c. 24.	do do from N. end of section subsidized to Comber .....	.....	2	6,400	.....	6,400	.....
1885	48-49 Vic, c. 60.	Manitoba and North-Western Ry. Co., Portage la Prairie to 20 M. from Prince Albert .....	.....	430	.....	.....	.....	2,753,000
1886	49 Vic, c. 11.....	do do Branch from Toddburn to Shellmouth	6,400 acres	.....	.....	.....	.....	.....
1885	48-49 Vic, c. 60.	Manitoba South-Western Colonization Ry. Co., Winnipeg to White Water Lake	6,400 do	26	.....	.....	.....	186,400
			6,400 do	150	.....	.....	.....	960,000

1888	51 Vic., c. 3	Massawippi Ry. Co., from point on Atlantic North Western Ry., near Magog, to Aver's Flat Station on the Massawippi Ry.	3,200	10	33,000	32,000	51,200
1887	50-51 Vic., c. 23	Medicine Hat Ry. and Coal Co., Medicine Hat to Coal Fields	6,400 acres	8			
1887	50-51 Vic., c. 24	Minudie Branch Ry. Co., from near River Hebert Ry. Bridge to Minudie	3,200	57	17,600	17,600	
1885	48-49 Vic., c. 59	Montreal and Sorel Ry. Co., St. Lambert to Sorel	1,600	45	73,000	74,000	
1885	48-49 Vic., c. 59	Montreal and Champlain Junction Ry. Co., Brousean to Dundee	500	60	30,000	30,000	
1887	50-51 Vic., c. 24	do do Salmon River at Fort Covington to Massena Springs			61,000	61,000	
1888	51 Vic., c. 3	Montreal and Champlain Junction, from end of subsidized line.		3	9,600	9,600	
1886	49 Vic., c. 10	Montreal and Western Ry. Co., St. Jérôme towards Le Désert.	5,161	70	361,270	361,270	
1886	49 Vic., c. 10	Montreal and Lake Maskinonge Ry. Co. for a line, St. Félix to Lake Maskinonge	3,200	10	32,000	32,000	
1884	47 Vic., c. 8	Northern and Western Ry. Co., Fredericton to Miramichi River	3,200	40	125,000	128,600	
1885	48-49 Vic., c. 59	do do end of line previously subsidized to Boiestown	3,200	6	19,200	19,200	
1886	49 Vic., c. 10	do do additional between Fredericton and Indian town, and extension to Deep-water at Chatham	3,200	10	32,000	32,000	
1885	48-49 Vic., c. 59	do do Indian town to Junction with N. & W. Ry. at or near Boiestown	3,200	44	140,800	140,800	
1882	45 Vic., c. 14	Northern and Pacific Junction Ry. Co., Gravenhurst to Callander	6,000	110	660,000	1,320,000	
1883	46 Vic., c. 25	do do Gravenhurst to Callander (additional)	6,000		660,000		
1883	46 Vic., c. 25	Napance, Tamworth and Quebec Ry. Co., Napance to Tamworth	3,200	28	89,600	89,600	
1886	49 Vic., c. 10	do do Tamworth to Tweed		18	70,000	70,000	
1887	50-51 Vic., c. 24	do do from N. end section subsidized to Tweed	3,200	4	12,800	12,800	
1886	49 Vic., c. 10	From Intercolonial Ry. near Newcastle to opposite Chatham, N.B.	3,200	6	19,200	19,200	
1885	48-49 Vic., c. 59	New Brunswick and Prince Edward Ry. Co., Sackville to Cape Tormentine	3,200	37	118,400	118,400	
1887	50-51 Vic., c. 24	Niagara Central Ry. Co., St. Catharines to Bridge over Niagara River	3,200	12	38,400	38,400	
1885	48-49 Vic., c. 60	North-Western Coal } Dumore Station, C.P.R., to Lethbridge	3,800	109			} 418,560
1887	50-51 Vic., c. 24	and Nav. Co. do additional of New Scotland Central Ry. Co., Lunenburg to a point in district of New Germany, and branch to Bridgewater Ry. Wharf	40				
1888	51 Vic., c. 3	do do Lunenburg to a point in district of New Germany, and branch to Bridgewater Ry. Wharf	3,200	34	109,800	109,800	
1887	50-51 Vic., c. 24	Ontario and Pacific Ry. Co., from N. end of subsidized line to Perth	3,200	46	147,200	147,200	
1885	51 Vic., c. 3	Ottawa and Parry Sound Ry., Point on C.P.R. to Eganville Oxford to Louisburg	3,200	6	19,200	19,200	
1885	51 Vic., c. 3	do do	3,200	22	70,400	70,400	
1882	45 Vic., c. 14	Oxford to New Glasgow	3,200	70	224,000	224,000	} 480,000
1883	46 Vic., c. 25	Canso to Louisburg	3,200	80	256,000	256,000	
1884	47 Vic., c. 8	Oxford to Sydney or Louisburg (additional)					\$30,000 p. ann for 15 years, with lease or transfer of Eastern Extension from New Glasgow to Canso.

ALPHABETICAL List of Railways Subsidized by the Dominion Government.—Continued.

A. D.	Designation of Act.	APPROPRIATION OF GRANT WITH DESCRIPTION OF LAND SUBSIDIZED.					CONDITION OF GRANT UNDER THE SUBSIDY ACTS.					
		Rate per Mile. Money and Land.	Estimated Number of Miles.	If per mile. Total for the whole work not to exceed—	If for a term of years. Amount and duration of instalments.	Total Subsidy. Money.	Land.	Acres.				
1887	50-51 Vic., c. 24.											
		\$ 3,200	7	\$ 22,400	.....	22,400						
		6,000	159	954,000	.....	2,394,000						
		12,000	120	1,440,000	.....	128,000						
		3,200	40	128,000	.....	271,200						
		3,200	84½	271,200	.....	272,000						
		3,200	85	272,000	.....	41,100						
		3,200	3	9,600	.....	.....				
		3,400 acres	2½	.....	.....	.....					142,784	
1885	48-49 Vic., c. 60.	6,400 do	325	.....	.....	.....					2,080,000	
1887	50-51 Vic., c. 23.	3,200	66	211,200	.....	211,200						
1884	47 Vic., c. 8	.....	90	.....	.....	.....			
1888	51 Vic., c. 3	.....	120	.....	.....	.....			
		3,200	120	384,000	.....	288,000						
		3,200	25	80,000	.....	384,000						
		3,100	32	96,000	.....	80,000						
		.....	32	96,000	.....	96,000						
		.....	(95)	186,295	.....	186,295						

1887	50-51 Vic., c. 24.	do	Quebec to Lake St. John	9	28,800	28,800	.....	28,800
1887	50-51 Vic., c. 24.	do	do	30	96,000	96,000	.....	96,000
1887	50-51 Vic., c. 24.	do	do	5	16,000	16,000	.....	16,000
1885	50-51 Vic., c. 24.	do	do	17	54,400	54,400	.....	54,400
1884	47 Vic., c. 8.	do	do	7	22,400	22,400	.....	22,400
1887	50-51 Vic., c. 24.	do	do	22	217,600	217,600	.....	217,600
1886	49 Vic., c. 10	do	do	22	70,400	70,400	.....	70,400
1887	50-51 Vic., c. 24.	do	do	23	70,400	70,400	.....	70,400
1883	46 Vic., c. 26	do	do	7	22,400	22,400	.....	22,400
1886	49 Vic., c. 10	do	do	18	57,600	57,600	.....	57,600
1886	49 Vic., c. 10	do	do	25	80,000	80,000	.....	80,000
1888	51 Vic., c. 3	do	do	5	16,000	16,000	.....	16,000
1886	49 Vic., c. 10	do	do	83	240,000	240,000	.....	240,000
1882	45 Vic., c. 14	do	do	83	258,000	258,000	.....	258,000
1885	48-49 Vic., c. 58	do	do	30	96,000	96,000	.....	96,000
1887	50-51 Vic., c. 24.	do	do	49	156,800	156,800	.....	156,800
1887	50-51 Vic., c. 24.	do	do	14	89,600	89,600	.....	89,600
1887	50-51 Vic., c. 24.	do	do	235	6,880,000	6,880,000	.....	6,880,000
1884	47 Vic., c. 25	do	do	425	1,536,000	1,536,000	.....	1,536,000
1886	19 Vic., c. 11	do	do	240	259,000	259,000	.....	259,000
1886	19 Vic., c. 10	do	do	30	96,000	96,000	.....	96,000
1887	50-51 Vic., c. 24.	do	do	24	76,800	76,800	.....	76,800
1887	50-51 Vic., c. 24	do	do	20	64,000	64,000	.....	64,000
1887	50-51 Vic., c. 24.	do	do	.....	.....	.....	15 per cent. on value of the structure...	180,000

APPENDIX No. 24.

Votes granted under Subsidy Acts, cancelled or amended by Subsequent Acts of Parliament.

GRANTS CANCELLED OR AMENDED.		Amount.		Authority for change.		Amount of revote.		Remarks.	
Year.	Act.	Granted to.	General description of Line Subsidized.	Amount.	—	Authority for change.	Amount of revote.	Remarks.	
1883	46 Vic., c. 25.	Gatineau Valley Ry.	For first 50 mile section of their railway from Hull Station.	160,000	Cancelled	48-49 Vic., c. 59, 1885.	\$	Amended by striking out "to the G. A. and E. Ry. Co.," inserting word "the" for "their" and omitting the words and figures "50 miles of."	
1883	46 Vic., c. 25.	Great American and European Short Line Ry. Co.	For 80 miles from Ganso to Louisburg or Sydney.	256,000	Amended.	47 Vic., c. 8, 1884	256,000		
1883	46 Vic., c. 25.	Northern and Western Ry. Co.	From I. C. R., near Miramichi to Morans near Demphy Village.	102,400	Cancelled	47 Vic., c. 8, 1884	128,000		
1883	46 Vic., c. 25.	Montreal and Western Ry. Co.	For first 50 mile section out of St. Jérôme, P.Q.	160,000	Cancelled	49 Vic., c. 10, 1886			
1884	47 Vic., c. 8.	Gatineau Ry. Co.	For a line from Kazabazua to Le Desert.	160,000	Cancelled	48-49 Vic., c. 59, 1885.	320,000	For 82 miles, Hull to Le Desert in lieu of subsidies granted by 46 Vic., c. 25, and 47 Vic., c. 8.	
1884	47 Vic., c. 8.	Napanea, Tamworth and Quebec.	Tamworth to Bogart or Bridge-water.	70,400	Cancelled	48-49 Vic., c. 59, 1885.	70,000	Again cancelled.	
1884	47 Vic., c. 8.	Montreal and Western Ry. Co.	From end of line subsidized towards Le Desert.	160,000	Cancelled	49 Vic., c. 10, 1886	361,270	\$5,161 per mile in lieu of subsidies under Act 46 Vic., c. 25, and 47 Vic., c. 8.	
1884	47 Vic., c. 8.	For a Railway	St. Andrews to Lachute.	22,400	Amended.	49 Vic., c. 10, 1886	22,400	For 7 miles to connect with C. P. R.	
1884	47 Vic., c. 8.	For a Railway	From Grand Piles to Lake Edward.	217,600	Cancelled	48-49 Vic., c. 59, 1885.	217,600	Again cancelled.	

1855	48-49 Vic., c. 59.	Napanee, Tamworth and Quebec.	Tamworth towards Bogart and Bridgewater.	70,000	Amended. 49 Vic., c. 10, 1886	70,000	For 18 miles of their railway in place of 16 miles.
1855	48-49 Vic., c. 59.	For a Railway	For 8 miles of railway from Long Sault to foot of Lake Temiscamingue.	25,600	Amended. 50-51 Vic., c. 24, 1887.	12,400	For 4 short sections of 2 miles, in lieu of a portion of 2 miles out of the 8 miles subsidized.
1855	48-49 Vic., c. 59.	For a Railway	From Grand Piles to Lake Edward.	217,600	Amended. 50-51 Vic., c. 24, 1887.	217,600	Granting subsidy to St Lawrence, Lower Laurentian and Saguenay Ry. Co.
1886	49 Vic., c. 10.	Caraquet Ry. Co.	For 10 miles, Lower Caraquet to Shippegan.	33,900	Amended. 50-51 Vic., c. 24, 1887.	32,000	For 7 miles in place of 10 miles subsidized.
1886	49 Vic., c. 10.	Lake Erie, Essex and Detroit Ry. Co.	For 37 miles, Windsor to Leamington.	118,400	Amended. 50-51 Vic., c. 24, 1887.	118,400	For 27 miles in place of 37 miles subsidized.
1886	49 Vic., c. 10.	Lake Temiscamingue Ry Co.	For wharves and landing stages.	6,000	Cancelled		
1886	49 Vic., c. 10.	For a Railway	For 28 miles, from Perth Centre to near Plaister Rock.	89,600	Amended. 50-51 Vic., c. 24, 1887.	89,600	To Tobique Ry. Co. for 14 miles of same line.
1886	49 Vic., c. 10.	For a Railway	From point on C. P. R. to Eganville.	70,400	Amended. 51 Vic., c. 3	70,400	To Ottawa and Parry Sound Ry. Co.
1887	50-51 Vic., c. 24.	Massawippi Ry. Co.	Magog to Ayer's Flat.	32,070	Amended. 51 Vic., c. 3	32,000	To Massawippi Ry. Co.
1886	48-49 Vic., c. 59	Thunder Bay Colonization Co.	Munillo to Urooked Lake.	271,000	Amended. 51 Vic., c. 3	271,200	To Port Arthur, Duluth and Western Ry. Co.
1887	50-51 Vic., c. 24	Saguenay and Lake St. John Ry. Co.	For 30 miles, Lake St. John towards Chicoutimi, or Chicoutimi towards Lake St. John.	96,000	Amended. 51 Vic., c. 3	96,000	To Quebec and Lake St. John Ry. Co.
1887	50-51 Vic., c. 24	Temiscouata Ry. Co.	For 30 miles, Edmundston towards St. Francis River.	96,000	Amended. 51 Vic., c. 3	100,000	For 20 miles, from Edmundston towards St Francis River.
1884	47 Vic., c. 8.	Quebec Central Ry. Co.	Beauce Junction to International Boundary.	211,200	Amended. 51 Vic., c. 3	288,000	To complete line from St. Francis Station to Moose River and in lieu of balance of unearned subsidy under 47 Vic., c. 8.
1885	48-49 Vic., c. 59.	Ottawa, Waddington and New York Ry. Co.	Ottawa to Waddington.	19,200			{ \$19,429 paid.
1884	47 Vic., c. 8.	Albert Southern Ry. Co.	Hopewell to Alma.	51,200			{ 31,771 forfeited.
1883	46 Vic., c. 25.	Baie des Chaleurs Ry.	Metepediac to Paspébiac.	620,000			{ 300,300 paid.
1884	47 Vic., c. 8.	Central Ry. Co.	Head of Grand Lake to I. C. R.	128,000			{ 319,700 forfeited.
1884	47 Vic., c. 8.	Irondele, Bancroft and Ottawa Ry.	Victoria Branch of Midland Ry. to Bancroft.	100,000			{ All forfeited.
1884	47 Vic., c. 8.	Ontario Pacific.	Corunwall to Perth.	281,600			{ \$15,000 paid.
							{ 145,000 forfeited.
							{ All forfeited.

REPORTS

RAILWAY STATISTICS

OF CANADA,

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

1888.

Printed by Order of Parliament.



OTTAWA

PRINTED FOR THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY.

A. SENECAI, SUPERINTENDENT OF PRINTING.

1889.

ERRATA.

Mileage of Toronto, Grey & Bruce Railway, for " 183.70 " read " 188.70."

Page 3, number of engines, for " 1614 " read " 1618."

Page 4, number of hopper and dumping cars, for " 3047 " read " 3147."

CANADIAN GOVERNMENT RAILWAYS.

OFFICE OF THE CHIEF ENGINEER AND

GENERAL MANAGER, OTTAWA, 4th March, 1889.

SIR,—I have the honor to submit to you the railway statistics of the Dominion for the year ended on the 30th June, 1888. For purposes of ready reference, I introduce here the usual summary of the appended tables:—

Miles of railway completed (track laid).....	12,701 66
do sidings	1,531 86
do iron rails in main line.....	1,037 55
do steel do do	11,664 11
Capital paid (including the four following items). \$	727,180,448 75
Government bonuses paid.....	134,278,219 36
do loans paid.....	20,920,085 27
do subscriptions to shares paid.....	300,000 00
Municipal aid paid.....	13,144,224 43
Miles in operation.....	12,162 88
Earnings	\$42,159,152 65
Working expenses.....	30,652,046 03
Net earnings.....	11,507,106 62
Passengers carried.....	11,416,791
Tons of freight carried.....	17,172,759
Miles run by trains.....	37,391,206
Passengers killed.....	20
Number of elevators	28
do guarded level crossings.....	115
do unguarded level crossings.....	7,910
do overhead bridges.....	364
do level crossings of other railways.....	147
do junctions with other railways.....	239
do do branch lines.....	159
do engines owned.....	1,614
do do hired.....	39
do sleeper and parlor cars; owned.....	71
do do do hired.....	8
do first-class cars owned.....	742
do do do hired	17
do second-class and immigrant cars owned	553
do do do hired.	15

Number of baggage, mail and express cars owned.	483
do do do do hired.	23
do cattle and box cars owned.....	24,918
do do do hired.....	2,952
do platform cars owned	12,750
do do hired.....	242
do coal and dump cars owned.....	3,047
do do do hired.....	.....

NOMINAL CAPITAL PAID.

	Total.		Per Mile.	
	\$	cts.	\$	cts.
Ordinary share capital.....	231,623,391	32	18,236	67
Preference do	95,870,491	19	7,548	26
Bonded debt.....	228,617,728	17	17,999	98
Aid from Dominion Government.....	132,155,545	81	10,405	13
do Ontario do	5,947,007	52	468	23
do Quebec do	9,611,986	41	756	79
do New Brunswick do	4,122,627	54	324	58
do Nova Scotia do	1,678,637	35	132	16
do Manitoba do	1,945,000	00	153	14
do British Columbia Government.....	37,500	00	2	95
do Municipalities	13,144,224	43	1,027	02
Capital from other sources	2,426,309	01	198	90
Total.....	727,180,448	75	57,253	81

GOVERNMENT and Municipal Loans, Bonuses, &c., promised to Railways completed and under construction.

	Total.	
	\$	cts.
Dominion Government.....	136,599,921	34
Ontario do	5,947,007	52
Quebec do	10,974,660	02
New Brunswick do	4,312,665	00
Nova Scotia do	1,966,394	94
Manitoba do	1,945,000	00
British Columbia do	37,500	00
Municipalities in Ontario.....	10,005,541	78
do Quebec	4,192,274	00
do New Brunswick.....	316,500	00
do Nova Scotia	250,000	00
do Manitoba	595,600	00
do British Columbia.....	37,500	00
do North-West Territories	35,000	00
Total	177,215,564	60

FATAL ACCIDENTS.

	Passengers Killed.	Employés Killed.	Others Killed.	Total.
Falling from cars or engines.....	4	22	4	30
Getting on or off trains in motion.....	6	7	8	21
At work making up trains.....		5		5
Coupling cars		6		6
Collisions and derailments	8	28	3	39
Walking or being on track	2	24	84	110
Explosions		3	1	4
Other causes.....		12	4	15
Total	20	107	104	231

The land grants made to railway companies cannot be said, with certainty, to form part of their capital, and I therefore submit them here in a separate table:—

Name of Railway.	Government.	Acres Granted.	Acres Sold.	Amount Realized.
				\$ cts.
Canadian Pacific	Dominion.....	25,000,000	10,094,678	20,169,656 00
do	do		Town sites.	890,985 00
Great Northern.....	Quebec.....	92,000		
Manitoba and North-Western.....	Dominion.....	2,918,400	146,622	389,174 25
North-West Coal and Navigation.....	do	420,480	22,667	30,291 65
Montreal and Lake Maskinongé.....	Quebec.....	32,000		
Ottawa and Gatineau Valley	do	458,000		
Qu'Appelle, Long Lake and Saskatchewan..	Dominion.....	96,000		134,400 00
Quebec, Montmorency and Charlevoix.....	Quebec.....	42,000		
St. Lawrence, Lower Laurentian & Saguenay	do	357,000		
Quebec and Lake St. John.....	do	1,620,000	1,620,000	1,134,000 00
Western Counties.....	Nova Scotia.....	150,000		
Wood Mountain and Qu'Appelle.....	Dominion.....	1,536,000		

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

COLLINGWOOD SCHREIBER.

Chief Engineer and General Manager.

A. P. BRADLEY, Esq.,
Secretary Department Railways and Canals.

No. 1.—SUMMARY STATEMENT OF CAPITAL FOR THE YEAR ENDED 30th JUNE, 1888.

Number.	NAME OF RAILWAY.	LENGTH OF LINE.		ORDINARY SHARE CAPITAL.			PREFERENCE SHARE CAPITAL.			BONDED DEBT.			GOVERNMENT AID.			MUNICIPAL AID.			CAPITAL FROM OTHER SOURCES.			TOTAL CAPITAL.		FLOATING DEBT.		REMARKS.	Number.				
		Completed. (Rails laid.)	Under Construction.	Authorized.	Subscribed.	Paid Up.	Authorized.	Subscribed.	Paid Up.	Authorized.	Paid Up.	Rate of Interest.	Name of Government.	Loan.	Bonus.	Subscription to Shares or Bonds.	Paid Up.	Loan.	Bonus.	Subscription to Shares or Bonds.	Paid Up.	Subscribed.	Paid Up.	Subscribed.	Paid Up.			Amount.	Rate of Interest.	Total Cost of Railway and Rolling Stock.	
																															Miles.
1	Albert	52-00		1,000,000 00	659,500 00	659,500 00			600,000 00	599,573 33	6	Dominion 29,665 00 N. Brunswick 45,000 00	15,000 00	469,665 00		464,213 99			70,000 00		70,000 00		1,199,073 33	1,813,287 32	10,478 36		1,784,073 33	Return of 1887.	1		
2	Albert Southern	10-50	6-50	150,000 00	150,000 00	34,420 00			160,000 00	40,000 00	6	Dominion 51,200 00 N. Brunswick 45,000 00 Quebec 700,000 00		99,200 00		26,428 57							248,200 00	100,848 57			66,000 00		2		
3	Baie des Chaleurs	40-00	60-00	3,000,000 00	300,000 00														5,000 00		5,000 00		1,620,000 00	540,300 00			75,438 70		3		
4	Bay of Quinte and Navigation Co.	3-50		500,000 00	100,000 00	75,000 00													116,000 00				304,000 00	60,000 00			638,210 00		4		
5	Brockville, Westport and Sault Ste. Marie	40-00	5-00	1,125,000 00	60,000 00	250,000 00			1,125,000 00	310,000 00	6	Dominion 102,400 00 N. Brunswick 96,000 00 Quebec 134,400 00		198,400 00		140,053 57							448,400 00	700,053 47					5		
6	Buctouche and Moncton	32-00		250,000 00	250,000 00																		3,424,400 00	3,362,864 00					6		
7	Canada Atlantic	130-30		2,000,000 00	2,000,000 00	2,000,000 00	1,000,000 00	1,000,000 00	2,000,000 00	1,000,000 00	5	do		147,858 65		147,858 65			322,500 00		322,500 00		15,470,358 65	34,495,959 24	200,899 18		27,451,478 50		7		
8	Canada Southern	382-44		15,000,000 00	15,000,000 00	15,000,000 00			20,000,000 00	19,023,600 59	5	do		147,858 65		147,858 65			322,500 00		322,500 00		15,470,358 65	34,495,959 24	200,899 18		27,451,478 50		8		
9	Canadian Government Railways	894-00										Dominion 1,284,495 79 Nova Scotia 645,545 00		1,928,040 76		1,928,040 76							45,887,759 20	45,887,759 20			45,887,759 20		9		
10	Canadian Pacific	3,415-30	4,691-70	65,000,000 00	65,000,000 00	65,000,000 00			78,650,000 00	60,955,933 33	5 & 3/4	Dominion 56,697,963 71 Ontario 1,479,000 00 Columbia 17,500 00 Quebec 1,440,000 00		58,214,463 71		58,214,463 71			497,500 00	42,500 00	450,000 00		123,664,463 71	184,620,397 04			184,620,397 04		10		
11	Montreal to Ottawa (Section Q. M. O. & O. R. J.)	74-00	45-00	1,000,000 00	180,000 00	176,000 00			6,472,666 00	6,472,666 00	5	Dominion 854,000 00 N. Brunswick 2,546,000 00	1,176,956 00	2,167,000 00		3,343,956 00	2,434,000 00				796,644 62		5,902,956 00	4,140,600 62			7,500,000 00	Dominion Government pays Quebec Government 5 per cent. per annum on this amount.	11		
12	Atlantic and North-West	206-10		1,000,000 00	1,000,000 00	500,000 00			5,225,000 00	1,544,866 60	5	Dominion 854,000 00 N. Brunswick 2,546,000 00	2,546,000 00	954,000 00		3,500,000 00	300,000 00		90,000 00		390,000 00		4,500,000 00	5,544,866 60					12		
13	North Shore	56-50		2,710,000 00	789,909 20	789,909 20			973,334 00		4	Dominion 17,312 00 Ontario 375,283 00		392,594 00		392,594 00			988,000 00		969,561 44	322,583 30	322,583 30	2,516,977 30	5,970,228 74			5,547,338 12		13	
14	St. Lawrence and Ottawa	183-70		1,000,000 00	813,800 00	785,490 00			3,500,000 00	3,500,000 00	4	Dominion 17,312 00 Ontario 375,283 00		392,594 00		392,594 00			988,000 00		969,561 44	322,583 30	322,583 30	2,516,977 30	5,970,228 74			5,547,338 12		14	
15	Toronto Grey and Bruce	334-30		2,000,000 00	2,000,000 00	2,000,000 00			3,744,000 00	2,544,000 00	5	Ontario 531,000 00 Manitoba 224,000 00 Dominion 224,000 00 N. Brunswick 180,000 00		900,000 00		404,080 00			1,085,000 00		1,085,000 00	524,103 00	524,103 00	2,000,000 00	18,703,333 00			1,616,000 00	605,103 00		15
16	Credit Valley	175-20		500,000 00	210,000 00	21,000 00			3,744,000 00	2,544,000 00	5	Ontario 531,000 00 Manitoba 224,000 00 Dominion 224,000 00 N. Brunswick 180,000 00		900,000 00		404,080 00			1,085,000 00		1,085,000 00	524,103 00	524,103 00	2,000,000 00	18,703,333 00			1,616,000 00	605,103 00		16
17	West Ontario Pacific	29-80		1,000,000 00	700,000 00	700,000 00			3,744,000 00	2,544,000 00	5	Ontario 531,000 00 Manitoba 224,000 00 Dominion 224,000 00 N. Brunswick 180,000 00		900,000 00		404,080 00			1,085,000 00		1,085,000 00	524,103 00	524,103 00	2,000,000 00	18,703,333 00			1,616,000 00	605,103 00		17
18	Manitoba South-Western Colonization	211-20		950,000 00	950,000 00	751,887 00			500,000 00		5	Ontario 531,000 00 Manitoba 224,000 00 Dominion 224,000 00 N. Brunswick 180,000 00		900,000 00		404,080 00			1,085,000 00		1,085,000 00	524,103 00	524,103 00	2,000,000 00	18,703,333 00			1,616,000 00	605,103 00		18
19	Carleton Place and Grenville	13-00		200,000 00	100,000 00	100,000 00			300,000 00	300,000 00	6	Ontario 126,500 00 Dominion 85,512 54 N. Brunswick 132,000 00		126,500 00		126,500 00			93,500 00		93,500 00		300,000 00	100,000 00	3,000 00	7	1,404,965 47		19		
20	Central Ontario	104-00		450,000 00	450,000 00	31,000 00			900,000 00	360,000 00	6	Ontario 126,500 00 Dominion 85,512 54 N. Brunswick 132,000 00		126,500 00		126,500 00			93,500 00		93,500 00		1,115,512 54	563,512 54			215,206 00		20		
21	Central of New Brunswick	15-00	30-00	900,000 00	900,000 00	31,000 00			900,000 00	360,000 00	6	Ontario 126,500 00 Dominion 85,512 54 N. Brunswick 132,000 00		126,500 00		126,500 00			93,500 00		93,500 00		1,115,512 54	563,512 54			215,206 00		21		
22	Chatham Branch	11-00					600,000 00	600,000 00	600,000 00	600,000 00	8	Ontario 144,230 00 Nova Scotia 144,230 00	26,000 00	18,740 00		44,740 00			113,500 00		113,500 00		209,000 00	209,000 00			241,000 00		22		
23	Cobourg, Blairton and Marmora	18-00		1,000,000 00	1,000,000 00	1,000,000 00			600,000 00	600,000 00	8	Ontario 144,230 00 Nova Scotia 144,230 00	26,000 00	18,740 00		44,740 00			113,500 00		113,500 00		209,000 00	209,000 00			241,000 00		23		
24	Cumberland Railway and Coal Co.	13-00		100,000 00	50,000 00	40,000 00			100,000 00	100,000 00	6	Dominion 96,000 00 Ontario 22,400 00		96,000 00		15,057 00							122,400 00	55,057 00	31,602 22	7	131,321 36		24		
25	Drummond County	4-80		100,000 00	100,000 00	100,000 00			200,000 00	200,000 00	6	Dominion 82,622 82 N. Brunswick 107,500 00		190,122 82		190,122 82				13,000 00		13,000 00		368,402 82	628,402 82			368,402 82		25	
26	Elgin, Petterdie and Havelock	26-50		200,000 00	165,250 00	165,250 00			260,000 00	260,000 00	5	Dominion 96,000 00 Ontario 96,000 00		192,000 00		192,000 00							372,000 00	372,000 00			1,354,000 00		26		
27	Eric and Huron	73-12		150,000 00	150,000 00	150,000 00			740,000 00	740,000 00	5	Ontario 179,000 00 Dominion 570,000 00		750,000 00		750,000 00				257,500 00		257,500 00	7,407 25	7,407 25	593,907 25	1,289,407 25			1,289,407 25		27
28	Esquimaux and Nainaim	78-00		3,000,000 00	1,500,000 00	1,200,000 00			825,000 00	825,000 00	5	Dominion 750,000 00 do 300,000 00	300,000 00	750,000 00		750,000 00						816,907 14	816,907 14	3,066,907 14	2,766,907 14			2,766,907 14		28	
29	Frederickton and St. Mary's Railway	894-25	3,092-94	445,000 00	445,000 00	425,000 00			825,000 00	825,000 00	5	New Brunswick 425,000 00 Ontario 400,000 00	15,142,858 33	425,000 00		410,000 00	3,000 00			3,000 00		3,000 00	204,300,120 18	201,733,661 12			1,869,000 00		29		
30	Grand Southern	182-00		104,012,288 66	99,913,288 66	99,913,288 66			82,245,202 10	80,244,198 19	4, 5 & 6	Dominion 82,622 82 N. Brunswick 107,500 00		190,122 82		190,122 82				13,000 00		13,000 00		368,402 82	628,402 82			368,402 82		30	
31	Grand Trunk	172-75		483,250 00	483,250 00	483,250 00			1,500,000 00	1,500,000 00	5	Ontario 179,000 00 Dominion 570,000 00		750,000 00		750,000 00				257,500 00		257,500 00	7,407 25	7,407 25	593,907 25	1,289,407 25			1,289,407 25		31
32	Buffalo and Lake J. and Lake Erie	172-75		483,250 00	483,250 00	483,250 00			1,500,000 00	1,500,000 00	5	Ontario 179,000 00 Dominion 570,000 00		750,000 00		750,000 00				257,500 00		257,500 00	7,407 25	7,407 25	593,907 25	1,289,407 25			1,289,407 25		32
33	G. T. Westport	539-53		441,550 00	221,200 00	221,200 00			47,435,040 94	47,435,040 94	4, 5 & 6	Ontario 179,000 00 Dominion 570,000 00		750,000 00		750,000 00															

TABLE showing Locations of the Railways of the Dominion of Canada,
30th June, 1888.

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Albert.....	Salisbury Station, Intercolonial Railway, to Hopewell and Albert on Chignecto Bay, and Harvey, N. B.....		52·00
Albert Southern.....	Hopewell to Herring Cove, N.B. (10·50 miles of track laid).....		17·00
*Atlantic and Northwest.....	Mile End to Lennoxville, thence eastward <i>via</i> Mattawamkeag, Maine (74·60 miles track laid).....		119·60
Baie des Chaleurs.....	Metapedia to Paspébiac (40 miles of track laid, rest under construction).....		100·00
Bay of Quinté and Navigation Co.	Deseronto, on Bay of Quinté, Lake Ontario, to Deseronto Junction, Grand Trunk Railway.....		3·50
Buctouche and Moncton.....	Moncton, on Intercolonial Railway to Buctouche, N.B.....		32·00
Brockville, Westport and Sault Ste. Marie.....	Brockville to Westport (40 miles of track laid, rest under construction).....		45·00
Canada Atlantic.....	City of Ottawa to Junction with Grand Trunk Railway at Lacolle; located thence to Boundary Crosses the St. Lawrence at Coteau by Steam ferry. Connects with Grand Trunk Railway at Coteau and Lacolle.....		130·30
Canada Southern.....	Main Line—Windsor to Suspension Bridge.....	226·18	
	Amherstburg Branch—Essex Centre to Amherstburg.....	15·70	
	St. Clair Branch—St. Clair Junction to Courtright.....	62·63	
	Fort Erie Branch—Fort Erie to Welland Junction.....	17·50	
	Erie and Niagara Branch—Fort Erie to Niagara.....	30·60	
	Oil Springs Branch—Oil Springs to Oil City.....	2·83	
do Leased.....	Sarnia, Chatham and Erie—Oil City to Petrolia.....	7·00	
Canadian Pacific.....	Main Line—Montreal to Vancouver.....	906·50	
	Branches in operation in Manitoba and North-West.....	219·70	
	Leased Line in Manitoba and North-West—Manitoba South-Western Colonization.....	211·20	
	Branches in operation in Ontario and Quebec.....	484·80	
	Leased Lines in Ontario and Quebec.....	304·10	
	Branches in British Columbia.....	10·40	
			†4,736·70
	Maine Line in operation—		
		Miles.	
	Montreal to Vancouver.....	2,906·50	
	Branches in operation—		
(Formerly North Shore Railway) {	St. Martin's Junction to Quebec.....	159·80	
	Grand Piles to Three Rivers.....	27·50	
	Joliette Junction to St. Felix.....	16·80	
	Berthier Junction to Berthier.....	2·00	
	St. Thérèse to St. Lin.....	15·00	
	do St. Eustache.....	8·00	
	St. Lin Junction to St. Jérôme.....	11·00	
	Buckingham Station to Buckingham Village.....	4·20	
	Hull to Aylmer.....	7·50	
	Carleton Junction to Brockville.....	45·50	
	Sudbury to Copper Mines.....	5·00	
	do Sault Ste. Marie.....	182·50	
	Carried forward.....	484·80	2906·50

* Leased to Canadian Pacific.

† Including 3·20 miles from Toronto Junction to Strachan Avenue.

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

Name of Railway.	Description.	Distance.	
		Miles.	Total.
Canadian Pacific—Continued.	Brought forward.....	484·80	2,906 50
	Winnipeg to Emerson.....	64·80	
	do Manitou.....	100·60	
	do Stonewall.....	18·00	
	do Selkirk.....	22·50	
	Vancouver to Coal Harbor.....	1·20	
	New Westminster to New West- minster Junction.....	9·20	
	Rosenfeldt to Gretna.....	13·70	
			714·80
	Leased Lines in operation—		
	Atlantic and North-West—		
	Mile End to Farnham.....	44·60	
	St. Lawrence and Ottawa—		
	Ottawa to Prescott.....	51·80	
	Chaudière Junction to Ottawa...	4·70	
Ontario and Quebec—			
Montreal Junction to Toronto Junction.....	334·30		
Leased Lines.....			
Credit Valley—			
Toronto Junction to St. Thomas.	116·60		
Streetsville Junction to Melville Junction.....	31·60		
Cataract to Elora.....	27·50		
Toronto, Grey and Bruce—			
Toronto to Owen Sound.....	116·60		
Orangeville to Teeswater.....	67·10		
West Ontario Pacific—			
Woodstock to London.....	26·40		
Manitoba South-Western Coloniza- tion—			
Winnipeg to Glenboro'.....	110·20		
Manitou to Deloraine.....	101·00		
		1,032·40	
	Total in operation.....	†4,661·70	
Canadian Government Railways:			
Intercolonial.....	Main Line—Halifax to Quebec.....	678·00	
	Branch—Moncton to St. John.....	89·00	
	do Truro to Pictou.....	52·00	
	do Painsec to Pointe du Chêne.....	11·00	
	do St. Charles to Lévis (via Chaudière).....	25·00	
	do Dalhousie Junction to Dalhousie.....	7·00	
	do Richmond to Dartmouth.....	4·00	
	do Derby to Indian town.....	14·00	
	do Stellarton to Pictou.....	14·00	
			894·00
Prince Edward Island.....	Main Line—Alberton to Georgetown.....	147·00	
	Branches—Mount Stewart to Souris.....	38·40	
	do Alberta to Tignish.....	13·10	
	do County Line to Cape Traverse.....	12·10	
	(Gauge, 3 ft. 6 in.)		210·60
Cape Breton.....	Hawkesbury to Sydney, C.B. (under construction).....		90·00
Oxford to New Glasgow, section of Montreal and European Short Line Railway.....	Pugwash Junction to Granton, N.S.....	50·00	
	Oxford Branch—Oxford to Pugwash.....	20·00	
	Pictou Branch—Loch Broom to Pictou.....	6·00	
	(Not completed.)		76·00

† Including 3·20 miles Toronto Junction to Strachan Avenue.

TABLE showing Location of Railways, &c.—Continued.

Name of Railway.	Description.	Distances.	
		Miles.	Total.
Caraquet	From Gloucester Junction, Intercolonial Railway, 5 miles south of Bathurst Station, easterly along the south shore of Baie des Chaleurs to Shippegan Harbour, N.B.		68·00
Carillon and Grenville	Carillon to Grenville, P.Q., connecting at both termini with Ottawa River Navigation Company's steamers, Gauge, 5 ft. 6 in.		13·00
Central Ontario	From Picton, in Prince Edward County, Ont., to Coe Hill Iron Mines, Wollaston, County of Hastings; connects with Grand Trunk at Trenton, Midland Railway, 2 miles west of Stirling, and with Ontario and Quebec, in Township of Rawdon.		104·00
Central Railway of New Brunswick	From Norton Station, on the Intercolonial Railway, to Salmon River (15 miles of track laid, rest under construction) ..		44·33
Chatham Branch	Town of Chatham, N.B., to Chatham Junction with Intercolonial Railway, and connecting with Northern and Western Railway		11·00
Cobourg, Blairton and Marmora	Town of Cobourg to Harwood	15·00	
	Blairton to Canadian Pacific Railway	3·00	
			18·00
Cumberland Railway and Coal Company (formerly Spring Hill and Parrsboro')	Spring Hill Junction, Intercolonial Railway, to Spring Hill Coal Mines, N.S., and Parrsboro', on the Bay of Fundy		32·00
Drummond County	Drummondville, P.Q., to Mitchell, connects with C.P.R. at Drummondville		13·00
Dominion Lime Co.'s Railway	Dudswell Junction, Quebec Central Railway, and Lime Quarries		4·80
Elgin, Petittcodiac and Havelock	From Elgin, County of Albert, N.B., to Petittcodiac Junction with Intercolonial Railway; thence to Havelock, in County of King's		26·50
Erie and Huron	Rondeau, Lake Erie, Ont., to Wallaceburg, passing through town of Chatham, Ont.; connects with Canada Southern and Great Western Railways ..		73·12
Esquimault and Nanaimo	Russell's Station to Wellington Mines		78·00
Fredericton and St. Mary's Railway Bridge Co.	Connecting the Fredericton Railway, at Fredericton, with the Northern & Western Railway at St. Mary's		1·33
Grand Southern	St. John to St. Stephen, N.B.		82·50
Grand Trunk—			
Grand Trunk Division	Main Line—Sarnia to Point Lévis and Island Pond ..	735·25	
	Sarnia Extension—Port Edward to Great Western ..	3·00	
	Branch—Montreal to Wharves	2·00	
	Three Rivers Branch—Arthabaska to Doucet's Landing	35·25	
	Kingston Branch—Main Line to Kingston	2·25	
	Galt and Waterloo Branch—Waterloo and Berlin to Galt	14·50	
	London Branch—St. Mary's to London	22·00	
	Champlain Branch—St. Lambert to Rouse's Point, Montreal to Lachine, St. Isidore to Province Line ..	73·50	
	Jacques Cartier Union—Jacques Cartier to Canadian Pacific Railway Junction	6·50	
Leased and Operated	Buffalo and Lake Huron—Goderich to Fort Erie	162·00	
	Georgian Bay and Lake Erie—Port Dover to Wiarton	172·75	
	Carried forward	1,229·00	

TABLE showing Location of Railways, &c.—Continued.

Name of Railway.	Description.	Distances.	
		Miles.	Total.
	Brought forward.....	1,229·00	
Grand Trunk— Leased and Operated.....	Montreal and Champlain Junction—Brosseau to Dundee	62·25	
	Northern Railway— Main Line—Toronto to Collingwood	94 96	
	Branch—Allandale to Gravenhurst.....	50 94	
	do Collingwood to Meaford	20 50	
	do Colwell to Penetanguishene.....	33 34	
	do Flos Tramway—Elmvale to Hillsdale..	8 28	
	Hamilton and North-Western— Main Line—Port Dover, on Lake Erie, to Allandale, on Lake Huron	134·07	
	Branch—Beeton to Collingwood.....	39·83	
	Northern and Pacific Junction (from Northern Railway at Gravenhurst to Junction with Canadian Pacific Railway at La Vase River, Lake Nipissing)	111·37	
Great Western Division	Main Line—Niagara Falls to Windsor	229 50	
	Toronto Branch—Hamilton to Toronto.....	38 50	
	Galt do Harrisburg to Guelph.....	28 98	
	Brant do do Brantford	8 00	
	Sarnia do Komoka to Sarnia	50 75	
	Petrolia do Wyoming to Petrolia	4 75	
	Loop Line—Port Erie to Glencoe	145 50	
	Allanburg Branch—Allanburg to Clifton Junction Welland—From Port Colborne to Port Dalhousie, Ont.	8 32	
Leased and Operated	Wellington, Grey and Bruce—Guelph to Southampton and Palmerston to Kincardine.....	25 00	
	London and Port Stanley—London to Port Stanley	168 35	
	London, Huron and Bruce—Hyde Park to Wingham Junction.....	23 66	
	Brantford, Norfolk and Port Burwell—Brantford to Tilsonburg Junction	68 89	
	NOTE.—The Georgian Bay and Lake Erie Railway includes the former Georgian Bay and Wellington, Port Dover and Lake Huron, and Stratford and Huron Railways.	34 75	
Leased—Midland Division.....	Midland—Port Hope to Peterboro' and Midland on Georgian Bay		
	Toronto and Nipissing (including former Lake Simcoe Junction Railway)	165 75	
Leased—Midland Division	Grand Junction—From Belleville to North Hastings and Peterboro'	111 50	
	Whitby and Haliburton (including former Victoria and Whitby, Port Perry and Lindsay Railways)..	87 75	
	Madoc Junction to Bridgewater.....	99 75	
		8 50	
Great Eastern	From Dundas, County Huntington, Que., to Lévis, Que. (under construction 60 miles).....		3,092·94
	Branch from St. Lambert's to Rouse's Point (6·12 miles track laid).....	220 00	
		36 00	
Great Northern.....	From near St. Andrew's on Ottawa River, to Quebec; 8 miles constructed from St. Jérôme to New Glasgow		256 00
Great North-West Central	Brandon, <i>viz</i> Battleford, to Rocky Mountains (50 miles under construction).....		170 00
Guelph Junction.....	From Guelph, Ont., to a point on Credit Valley Division of C. P. R., near Campbellsville.....		15 00
Harvey Branch	Albert to Harvey Bank, N.B.		3 00

TABLE showing Location of Railways, &c.—Continued.

Name of Railway.	Description.	Distances.	
		Miles.	Total.
Irondale, Bancroft and Ottawa....	From Orillia, Ont., to Ottawa (located from Mackinmount to Bancroft, 50 miles). Will connect with G. T. R. and Northern Railways at Orillia. Also with Kingston and Pembroke and with C. P. R. at Ottawa. 10 miles of track laid.....		225-00-
International.....	Lennoxville, Que., to Boundary Line of Maine.....		81-68
Joggins.....	Maccan Station, I. C. R., to Prospect Mine.....		13-00
Kent Northern.....	Richibucto, N. B., to Intercolonial Railway.....		27-00
Kingston and Pembroke.....	Main Line—Kingston to Pembroke.....	103-00	
	Glendon Branch—Bedford to Zanesville.....	4-00	
	do To Robertsville Mines.....	1-00	
	do To Doran's Mills, Charcoal Works McLaren's Mills, Bethuen's Mines, Lavant Mills, Clyde Forks Mills and Francis Mills.....	4-00	
	(Connects with Grand Trunk at Kingston, Canadian Pacific at Sharbot Lake and at Renfrew).		112-00
L'Assomption.....	L'Epiphanie Station, C. P. R., to L'Assomption.....		3-50
Lake Temiskaming Colonization Railway.....	Mattawa to head of Long Sault, Ottawa River.....		6-00
Leamington and St. Clair.....	Comber Station, Canada Southern Railway, to Leamington.....		14-00
Manitoba and North-Western.....	Portage la Prairie to Langenburg.....	180-57	
	Shell River Branch.....	11-45	
	Leased—Saskatchewan and Western—Minnedosa to Rapid City (under construction from Langenburg to Saltcoats 25-32 miles).....	15-47	
Manitoba South-Western Colonization.....	From Winnipeg to Glenboro' and from Manitou to Deloraine. Leased to C. P. R.....		207-49-
Massawippi Valley.....	From Lennoxville to Vermont boundary, there connecting with Connecticut and Passumpsic Rivers Railway. Also connects with Grand Trunk and International Railways at Lennoxville.....	32-00	
	Branch—Stanstead Junction to Stanstead.....	2-00	
			34-00-
Montreal and Sorel.....	From Junction with Grand Trunk at St. Lambert to Armstrong on Richelieu River, opposite to Sorel.....		44-67
Montreal and Lake Maskinongé..	From St. Felix to St. Gabriel de Brandon, Que.....		12-75
Montreal and Vermont Junction..	From Junction with Stanstead, Shefford and Chambly Railway, 2½ miles east of St. John, P. Q., to Junction with Vermont and Canada Railway, at Vermont Boundary. Also connects at Stanbridge with Lake Champlain and St. Lawrence Junction Railway.....		23-60
Napanee, Tamworth and Quebec..	From Junction with Grand Trunk Railway at Town of Napanee, Ont., to Village of Tamwerth.....		28-50
New Brunswick.....	From Gibson (opposite Fredericton on St. John River) N. B., to Edmundston.....	164-00	
	Branch—Newbury Junction to Woodstock.....	6-00	
	do Aroostock to Maine Boundary.....	4-00	
			174-00-
	Leased Lines—		
	New Brunswick and Canada—Woodstock to St. Stephen and St. Andrew.....	127-00	
	St. John and Maine—Carleton to St Croix and Vanceboro'.....	92-00	
	Fredericton—Fredericton Junction to City of Fredericton.....	22-50	
			241-50-

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

Name of Railway.	Description.	Distance.	
		Miles.	Total.
New Brunswick and Prince Edward.....	From Sackville Station, Intercolonial Railway, to Cape Tormentine.....		36·00
Northern and Western of New Brunswick	From Gibson (opposite City of Fredericton) to Chatham Junction—Intercolonial Railway..... Blackville to Indiantown	107·00 9·00	116·00
	(Connects also with New Brunswick Railway at Gibson.)		
Northern and Pacific Junction Railway	Leased to Grand Trunk.....		111·37
North Shore, formerly portion of Quebec, Montreal, Ottawa and Occidental Railway.....	Purchased by Canadian Pacific		206·10
North-Western Coal and Navigation.....	From Junction with Canadian Pacific Railway at Dunmore, 651 miles west of Winnipeg, in a westerly direction to the Colliery at Lethbridge, in the District of Alberta, gauge 3 feet.....		109·50
Nosbonsing and Nipissing.....	From Nosbonsing, on Canadian Pacific Railway, to Lake Nipissing.....		5·50
Nova Scotia Central	From Middleton, on the Windsor and Annapolis Railway, to town of Lunenburg, on the Atlantic Coast, N.S.—under construction.....		75·00
Ottawa and Gatineau Valley.....	Canadian Pacific Railway Station at Hull, Que., to Wakefield		19·50
	(3 miles graded.)		
Pontiac Pacific Junction.....	From Junction with Canadian Pacific Railway at Aylmer, Que., to Pembroke, Ont.....		85·00
	(Rails laid on 71 miles only from Aylmer.)		
Qu'Appelle, Long Lake and Saskatchewan.....	From Canadian Pacific Railway at Regina, north-westerly to Long Lake.....		23·00
Quebec and Lake St. John.	Quebec to Lake St. John.....	190·00	
	Chambord to Chicoutimi.....	5·00	195·00
	Junction with North Shore Railway 4 miles from Quebec to Roberval, Lake St. John, 195 miles completed, 54 miles under traffic.		
	Branches not built—		
	St. Gabriel to Rivière aux Pins.....	10·00	
	Lake Edward to La Tuque.....	30·00	
	Lake St. John to Chicoutimi	70·00	
Quebec Central.....	Main Line—Sherbrooke to Harlaká Junction, Intercolonial Railway, 5 miles from Lévis, Que.....	138·00	
	Chaudière Branch—Beauce Junction to St. Francis.	15·00	
	Angus Branch—East Angus to Angus Mills.....	1·00	154·00
	(Also 40 miles under construction.)		
	(Also connects with Grand Trunk Passumpsic and Waterloo and Magog Railways at Sherbrooke.)		
Quebec, Montmorenci and Charlevoix	Hedleyville, Parish of St. Roch, Quebec, to St. Anne.....	21·00	
Stansstead, Shefford and Chambly	From Junction with Montreal and Vermont Junction Railway, near St. John, Que., easterly to Waterloo		43·00
	(Connects with South-Eastern, and Champlain and St. Lawrence Junction Railways.)		

TABLE showing Locations of Railways, &c.—*Concluded.*

Name of Railway.	Description.	Distance.	
		Miles.	Total.
South-Eastern.....	Main Line—West Farnham to Boundary Line.....	44·00	
	Northern Division—Sutton Junction to Sorel.....	96·00	
	Branch—Drummondville to L' Avenir.....	12·00	
	Leased Lines—		
	Montreal, Portland and Boston—Longueuil and		
	St. Lambert to Farnham.....	36·00	
	Branch—Marieville to St. Césaire.....	9·00	
	Lake Champlain and St. Lawrence Junction—		
	Stanbridge to St. Guillaume.....	63·00	
	(Connects with Connecticut and Passumpsic		260·00
	Railway, Grand Trunk, and Stanstead, Shef-		
	ford and Chambly.)		
St. Catharines and Niagara Cen-	St. Catharines, Ont., to Niagara Falls.....		12·35
tral.....			
St. John Bridge and Railway	Lies within the limits of the City of Portland, N.B.,		
Extension.....	and connects the Intercolonial and New Bruns-		1·75
	wick Railways.....		
St. Lawrence and Ottawa. (Now	Ottawa to Prescott.....	51·80	
under lease to Canadian Pacific	Branch—Chaudière Junction to Ottawa—(Connects		
Railway.....	with Grand Trunk Railway and St. Lawrence		
	River Steamers at Prescott and with Canadian		
	Pacific Railway and Canada Atlantic Railway		
	at Chaudière, Ottawa.....	4·70	
St. Lawrence, Lower Laurentian	From St. Tite on Canadian Pacific Railway to		56·50
and Saguenay.....	Rivière à Pierre on Quebec and Lake St. John		
	Railway (22 miles of track laid).....		42·75
St. Louis, Richibucto and Buc-	Richibucto to Buctouche—(Completed from Richi-		
touche.....	bucto to St. Louis, 7 miles).....		
St. Martin's and Upham.....	Hampton, Junction, Intercolonial Railway, to St.		
	Martin's, on Bay of Fundy.....		29·12
Thousand Islands.....	Gananogue to Gananogue Station, G. T. R.....		3·15
Temiscouata.....	Rivière-du-Loup, Que., on Intercolonial, to Ed-		
	wmundston, N. B., on the New Brunswick Railway.		81·20
Waterloo and Magog.....	Waterloo to Sherbrooke, Que.—(Connects with		
	Stanstead, Shefford and Chambly and South-		
	Eastern Railways).....	39·00	
	Missisquoi Valley Railway—(Only completed from		
	Bolton Forest on Waterloo and Magog, southerly		
	for 10·10 miles, not operated).....	10·10	
Western Counties.....	Yarmouth to Digby, N.B.....		49·10
Windsor and Annapolis.....	Windsor to Annapolis, N.S.....		67·00
Leased Line.....	Windsor Branch—Windsor to Windsor Junction,	84·00	
	Intercolonial Railway, 14 miles from Halifax.....	32·00	
Wood Mountain and Qu'Appelle...	From Canadian Pacific Railway, near Qu'Appelle		116·00
	Station to Fort Qu'Appelle, thence northwest-		
	erly (17 miles under construction).....		110·00
Winnipeg and Hudson Bay.....	Winnipeg to Port Nelson on Hudson Bay.....		650·00
	(Constructed 40 miles, Winnipeg to St. Laurent		
	on Lake Manitoba.)		
West Ontario Pacific.....	London to Woodstock, Ont.....		26·60
	(Included in Canadian Pacific.)		

SUMMARY STATEMENTS.

No 2.—SUMMARY STATEMENT of Characteristics of

Number.	Name of Railway.	Length of Line.				Length of Sidings.	Weight per Yard.	
		Completed. (Rails laid.)	Under construction.	Iron Rails.	Steel Rails.		Iron Rails.	Steel Rails.
						lbs.	lbs.	
1	Albert.....	52·00		52·00		2·25	56	
2	Albert Southern.....	10·50	6·50		10·50		56	
3	Bay of Quinté and Navigation Co.....	3·50			3·50	3·00	40	
4	Baie des Chaleurs.....	40·00	60·00		40·00		56	
5	Brockville, Westport and Sault Ste. Marie.....	40·00	5·00		40·00	1·00	56	
6	Buctouche and Moncton.....	32·00			32·00	2·50	56	
7	Canada Atlantic.....	130·30			130·30	17·00	56	
8	Canada Southern.....	362·44		47·52	314·92	134·47	60	
9	Canadian Government Railways—							
	Intercolonial.....	894·00			894·00	129·25	56 57½ 67	
	Eastern Extension.....	80·00			80·00	4·00	56	
	Prince Edward Island.....	210·60		148·16	62·44	15·63	40 50 & 52	
	Cape Breton.....		90·00					
	Oxford and New Glasgow.....		76·00					
10	Canadian Pacific Railway.....	3415·30						
	Atlantic and North-West.....	74·60	45·00					
	North Shore.....	206·10						
	St. Lawrence and Ottawa.....	56·50						
	Toronto, Grey and Bruce.....	183·70						
	Ontario and Quebec.....	334·30		58·20	4633·50	428·50	45 & 56 56, 57½, 60 & 70	
	Credit Valley.....	175·20						
	West Ontario Pacific.....	26·60						
	Manitoba South-Western Colonization.....	211·20						
11	Caraquet.....	68·00			68·00	3·25	50	
12	Carillon and Grenville.....	13·00		13·00			65	
13	Central Ontario.....	104·00			104·00	11·00	42 & 56	
14	Central of New Brunswick.....	15·00	30·00		15·00	1·00	54	
15	Chatham Branch.....	11·00			11·00	1·00	56½ & 60	
16	Cobourg, Blairton and Marmora.....	18·00		18·00			56	
17	Cumberland Railway and Coal Co.....	32·00			32·00	10·00	56 & 67	
18	Dominion Lime Co.....	4·80			4·80	·75	56	
19	Drummond County.....	13·00			13·00	1·50	56	
20	Elgin, Petitoodiac and Havelock.....	26·50		12·50	14·00	1·00	60 50	
21	Erie and Huron.....	73·12			73·12		54 & 56	
22	Esquimalt and Nanaimo.....	78·00			78·00	1·70	50 & 54	
23	Fredericton and St. Mary's Railway Bridge Co.....	1·33			1·33		60	
24	Grand Southern.....	82·50			82·50	2·00	56	
25	Grand Trunk.....	894·25						
	Buffalo and Lake Huron.....	162·00						
	Georgian Bay & Lake Erie.....	172·75						
	Great Western.....	539·53						
	London and Port Stanley.....	23·66						
	Wellington, Grey & Bruce.....	168·35						
	London, Huron & Bruce.....	68·89						
	Brantford, Norfolk & Port Burwell.....	34·74						
	Midland.....	165·75		278·50	2814·44	589·50	40 to 65 56 to 72	
	Toronto and Nipissing.....	111·50						
	Carried forward.....	10,180·23	312·50	627·88	9,532·35	1,360·30		

*Return of 1887.

Roads, &c., for the Year ended 30th June, 1888.

Number of Ties to Mile.	Nature of Rail Fastening.	No. of Grain Elevators.		No. of Level Crossings.	No. of over-head Bridges.	Height of over-head Bridges above rail level.	Level Crossings of other Railways.	No. of Junctions with other Railways.	No. of Junctions with Branch Lines.	Radius of sharpest curve.	No. of feet per mile of heaviest gradient.	Gauge of Railway.	Number.
		Guarded.	Not Guarded.										
						feet.							
2,240	Fishplates		93					1	1		76	4-8½	1
2,640	do		7					2		955	120	4-8½	2
3,000	do		11					1		400	90	4-8½	3
2,600	do			1	22			1		637	67	4-8½	4
2,640	Fisher Bridge Joint.....							1		717	58	4-8½	5
2,640	Fishplates		18				1	1		955	73	4-8½	6
2,640	do	4	86	3			7	4		2865	40	4-8½	7
2,800	Joint spliced with nutlocks, bolts and washers ...	3	364	18	19	11	11	4	913	75	4-8½	8	
2,640-2,112	Angle and fishplates.....	1	8	429	29	18½ to 35	4	22	17	694	65	4-8½	9
2,640-2,112	Fishplates		60	9	20			1		955	79½	4-8½	
2,640	Angle and fishplates.....		956	2	17½					396	90	3-6"	
2,640	Angle and fishplates.....	5	17	1945	49	20-22-10	26	33	33	500	*237½	4-8½	10
2,600	Fishplates							1		1000	60	4-8½	11
2,200	do and chairs.....	1	7	1	16					1910	100	5-6"	12
2,640	do bolts		94				4	3		955	105	4-8½	13
2,640	do do		5					2		955	66	4-8½	14
2,640	do		5					2		955	52-80	4-8½	15
2,500	do and chairs.....						1	1		273		5-6"	16
2,600	do bolts and nuts.....		13					1		820	160	4-8½	17
2,640	do do		5					1		955	103	4-8½	18
2,640	do		9					1	1	717	63	4-8½	19
2,640	Chairs and fishplates.....		19					1	1	717	80	4-8½	20
2,816	Fishplates		108				3	4		661	52	4-8½	21
2,992	Angle fishplates and bolts.....		15	2	23					573	80	4-8½	22
2,400	do do		4					2				4-8½	23
2,464	Suspended joint fishplates.....		52				1	3		716	79	4-8½	24
3,640	Angle bars, fishplates & bolts..	13	80	2519	222	15-6-28-4	64	67	74	1100	105½	4-8½	25
		19	113	6824	336		123	167	130				

*Temporary.

No. 2.—SUMMARY STATEMENT OF

Number.	Name of Railway.	Length of Line.				Length of Sidings.	Weight per Yard.	
		Completed. (Rails laid.)	Under construc- tion.	Iron Rails.	Steel Rails.		Iron Rails.	Steel Rails.
						lbs.	lbs.	
	Brought forward.....	10180·23	312·50	627·88	9552·35	1360·30	.....	.....
	Grand Junction..... 87·75							
	Whitby, P. Perry & Lindsay 46·50							
	Victoria 53·25							
	Northern.....208·00							
	Northern & Pacific Junct'n.111·37							
	Hamilton & North-Western.173·90							
	Madoc Jn. to Bridgewater. 8·50							
	Montreal & Champlain Ju. 62·25							
26	Great Eastern	6·50	60·00	.....	6·50	.....	.....	56
27	Great North-West Central.....	.....	50·00	.....	.....	.....	.....	.....
28	Great Northern	7·84	.....	.....	7·84	.....	.....	56
29	Guelph Junction	15·00	.....	.....	15·00	·20	.....	56
30	Harvey Branch.....	3·00	.....	.....	3·00	·20	.....	56
31	International	81·66	.....	.....	81·66	3·50	.....	56
32	Iroindale, Bancroft and Ottawa.....	10·00	.....	.....	10·00	·25	.....	56
33	Joggins.....	13·00	.....	.....	13·00	1·00	.....	56
34	Kent Northern.....	27·00	.....	20·00	7·00	1·00	40 & 60	56
35	Kingston and Pembroke.....	112·50	.....	9·50	103·00	21·00	50 & 84	56
36	L'Assomption	3·50	.....	.....	3·50	·20	.....	56
37	Lake Temiskaming Colonization and Railway Co.....	6·00	.....	.....	6·00	.....	.....	16
38	Leamington and St. Clair	14·00	.....	.....	14·00	1·33	.....	56
39	Manitoba & North-Western.192·02 } Saskatchewan and Western.15·47 }	207·49	.....	.....	207·49	16·47	.....	56
40	Massawippi Valley.....	34·00	.....	1·00	33·00	.....	56	50
41	Montreal and Lake Maskinongé.....	5·00	8·00	.....	5·00	.....	.....	56
42	Montreal and Sorel.....	44·67	.....	.....	44·67	3·33	.....	56
43	Montreal and Vermont Junction	23·60	.....	.....	23·60	2·00	.....	60
44	Napanee, Tamworth and Quebec.....	28·50	.....	.....	28·50	2·00	.....	56
45	New Brunswick.....174·00 } New Brunswick & Canada.127·00 } St. John and Maine..... 92·00 } Fredericton	415·50	.....	55·70	359·80	33·60	52 & 56	52
46	New Brunswick and Prince Edward..	36·00	.....	.....	36·00	1·50	.....	56
47	Northern and Western of New Brun- swick	116·00	.....	.....	116·00	5·00	.....	56½ & 61
48	North-Western Coal and Navigation Co.....	109·50	.....	.....	109·50	3·00	.....	28 & 30
49	Nova Scotia Central.....	.....	76·00	.....	.....	.....	.....	.....
50	Nosbonsing and Nipissing.....	5·50	.....	.....	5·50	1·00	.....	56
51	Ottawa and Gatineau Valley.....	.....	3·00	.....	.....	.....	.....	.....
52	Pontiac Pacific Junction.....	71·00	14·00	.....	71·00	2·00	.....	56
53	Qu'Appelle, Long Lake and Saskat- chewan	23·00	.....	.....	23·00	.....	.....	.....
54	Quebec and Lake St. John.....	195·00	.....	.....	195·00	10·00	.....	56
55	Quebec Central	154·00	.....	24·00	130·00	10·00	.....	56
56	Quebec, Montmorency and Charle- voix	21·00	.....	.....	21·00	.....	.....	56
57	Stanstead, Shefford and Chambly....	43·00	.....	29·00	14·00	5·50	60	60
	Carried forward.....	12012·99	523·50	767·08	11245·91	1484·38	.....	.....

Characteristics of Roads, &c.—Continued.

Number of Miles.	Nature of Rail Fastening.	No of Grain Elevators.		No. of Level Crossings.	No. of overhead Bridges.	Height of overhead Bridges above rail level.	Level Crossings of other Railways.	No. of Junctions with other Railways.	No. of Junctions with Branch Lines.	Radii of sharpest curve.	No. of feet per mile of heaviest gradient.	Gauge of Railway.	
		Guarded.	Not Guarded.										Number.
		19	113	6824	336	feet.	123	167	130				
2,640	Fishplates			5			1	1		1910	26	4'8½	26
2,640								1		1273½	52'80	4'8½	27
2,640	Angle plates			25	1	21'6		1		955	52'80	4'8½	28
2,600	Fishplates			2	1	15'10		2		717	52'80	4'8½	29
2,260	Fish and angle plates			27				2		1146	74	4'8½	30
2,640	Fishplates			3				1		1000	60	4'8½	31
3,000	do			4				1		955	79	4'8½	32
2,432	do			4				2	1	1000	60	4'8½	33
2,640	do			54	4	16½-20½	4	4	12	955	79	4'8½	34
2,500	do			7				1			20	4'8½	35
													36
2,600	Fishplates	3		21				1		955	20	4'8½	37
2,700	Fishplates and steel angle bars	6		140				1	2	955	105'60	4'8½	38
2,800	do			20	1	19				955	76	4'8½	39
2,720	do							1			52'80	4'8½	40
2,640	do			12				2		2292	53	4'8½	41
2,600	do and bolts			51	1	17'5		2			52	4'8½	42
3,000	Angle fishplates			24						882	88	4'8½	43
													44
2,640	Fishplates			158	3	18	1	5	5	540	85	4'8½	45
2,400	do			26				1		1000	66	4'8½	46
2,640	Fishplates, bolts and angle plates			25			1	5	1	955	80	4'8½	47
2,112	Fishplates			4				1		1433	52	3'0	48
2,600	Fishplates			1	1	23	3	1	2	882	80	4'8½	49
								1		637	132*	4'8½	50
2,640	Angle fishplates							1		1433	52'80	4'8½	51
										1146			52
2,640	Fishplates			26	3			2		716	132	4'8½	53
2,640	do			26			1	5	1	882	76	4'8½	54
2,640	do									1645	53	4'8½	55
2,400	do			42			3	4			60	4'8½	56
													57
		28	113	7531	351		138	216	154				

*Temporary.

No. 2.—SUMMARY STATEMENT of

Number.	Name of Railway.	Length of Line.				Length of Sidings.	Weight per Yard.	
		Completed. (Rails laid.)	Under construc- tion.	Iron Rails.	Steel Rails.		Iron Rails.	Steel Rails.
	Brought forward	12012·99	523·50	767·08	11245·91	1484·38	lbs.	lbs.
58	South Eastern..... 152·00	260·00	.....	129·50	130·50	29·00	40-56-60	57½
	Montreal, Portland and Boston..... 45·00							
	St. Lawrence and Lake Champlain Junction..... 63·00							
59	St. Catharines and Niagara Central..	12·35	.....	.....	12·35	1·00	.....	56
60	St. John Bridge and Railway Extension	1·75	.....	.....	1·75	.....	.....	60
61	St. Lawrence, Lower Laurentian and Saguenay.....	22·00	.....	.....	22·00	1·50	.....	56
62	St. Louis, Richibucto and Buctouche.	7·00	.....	.....	7·00	·25	.....	56
63	St. Martin's and Upham.....	29·12	.....	29·12	.....	.....	56-60-70	.....
64	Temiscouata.....	81·20	.....	.....	81·20	3·80	.....	56
65	Thousand Islands.....	3·15	.....	.....	3·15	·63	.....	56
66	Waterloo and Magog..... 39·00	49·10	.....	10·10	39·00	2·50	.....	56
	Missisquoi Valley..... 10·10							
67	Western Counties.....	67·00	.....	67·00	.....	4·00	56	.....
68	Windsor and Annapolis..... 84·00	116·00	.....	34·75	81·25	4·80	50 & 67	56
	Windsor Branch..... 32·00							
69	Winnipeg and Hudson Bay.....	40·00	.....	.....	40·00	.....	.....	56
70	Wood Mountain and Qu'Appelle..	.....	17·00	.....	.....	.....	.....	.....
		12701·66	540·50	1037·55	11664·11	1531·86	.....	.....

Characteristics of Road, &c.—*Concluded.*

Number of Ties to Mile.	Nature of Rail Fastening.	No. of Grain Elevators.		No. of overhead Bridges.	Height of overhead Bridges above rail level.	Level Crossings of other Railways.	No. of Junctions with other Railways.	No. of Junctions with Branch Lines.	Radius of sharpest curve.	No. of feet per mile of heaviest gradient.	Gauge of Railway.	Number.	
		Guarded.	Not Guarded.										
		28	113	7531	351	feet.	138	216	154				
3,000	Fishplates		1	229	1	20.6	7	11	5	637	80	4.8½	58
2,700	do			17	10	22	1	1		717	79	4.8½	59
			1	3				2				4.8½	60
2,600				7				1		717	80	4.8½	61
2,432	Fishplates			3				1		1000	45	4.8½	62
2,240	Sleeves and fishplates.....			22				1		717	129.50	4.8½	63
2,640	Fishplates			20				2		819	80	4.8½	64
3,000	Angle plates			8				1		660	84.40	4.8½	65
2,400	Fishplates			1	1	24	1	2		574	75	4.8½	66
2,600	do									600	84	4.8½	67
2,640	do			69	1	32		1		693	75.50	4.8½	68
2,640	do											4.8½	69
													70
		28	115	7910	364		147	239	159				

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

Number.	Name of Railway.	Length of Line.		Number of Engines.		Number of Sleeping Cars.		Number of Palace or Drawing Room Cars.	
		Completed.	Under Construction.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.
1	Albert	52·00		3					
2	Albert Southern	10·50	6·50	1					
3	Bay of Quinté and Navigation Co.	3·50		1					
4	Baie des Chaleurs	40·00	60·00	2	1				
5	Brockville, Wesport and Sault Ste. Marie	40·00	5·00	2					
6	Buctouche and Moncton	32·00		2					
7	Canada Atlantic	130·30		7	10				
8	Canada Southern	362·44		128					
9	Canadian Government Railways								
	Intercolonial	894·00		164		13		2	
	Eastern Extension	80·00		9					
	Prince Edward Island	210·60		21					
	Cape Breton		90·00						
	Oxford and New Glasgow		76·00						
10	Canadian Pacific Railway	3,415·30							
	Atlantic and North-West	74·60	45·00						
	North Shore	206·10							
	St. Lawrence and Ottawa	56·50							
	Toronto, Grey and Bruce	183·70							
	Ontario and Quebec	334·30							
	Credit Valley	175·20							
	West Ontario Pacific	28·60							
	Manitoba S. W. Colonization	211·26							
	Total		4,691·70	368	*19	54	*8	in fore-going.	
1	Caraquet	68·00		3					
2	Carillon and Grenville	13·00		3					
13	Central Ontario	104·00		10					
14	Central of New Brunswick	15·00	30·00	1					
15	Chatham Branch	11·00		2					
16	Cobourg, Blairton and Marmora	18·00		2					
17	Cumberland Railway and Coal Co.	32·00		7					
18	Dominion Lime Co.	4·80							
19	Drummond County	13·00		1					
20	Elgin, Petitediac and Havelock	26·50		2					
21	Erie and Huron	73·12		5					
22	Esquimalt and Nanaimo	78·00		4					
23	Fredericton and St. Mary's Railway Bridge Co.	1·33							
24	Grand Southern	82·50		5					
25	Grand Trunk	894·25							
	Buffalo and Lake Huron	162·00							
	G. T., Georgian Bay and Lake Erie.	172·75							
	Great Western	539·53							
	London and Port Stanley	23·66							
	Wellington, Grey and Bruce	168·35							
	London, Huron and Bruce	68·89							
	Brantford, Norfolk and Port Burwell ...	34·74							
	Midland	165·75							
	Toronto and Nipissing	111·50							
	Grand Junction	87·75							
	Whitby, Port Perry and Lindsay	46·50							
	Victoria	53·25							
	Northern	208·00							
	Northern and Pacific Junction	111·37							
	Hamilton and North-Western	173·90							
	Madoc Junction to Bridgewater	8·50							
	Montreal and Champlain Junction	62·25							
	Total		3,092·94	687					
	Carried forward		10180·23	312·50	1440	30	67	8	2

Rolling Stock, for the Year ended 30th June, 1888.

Number of First Class Cars.		Number of Second Class and Emigrant Cars.		Number of 'Baggage, Mail and Express Cars.		Number of Cattle and Box Freight Cars.		Number of Platform Cars.		Number of Hopper and Dumping Cars.		Remarks.		
Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.			
3				1		10		20				1	Return of 1886-87.	
								8				2		
1				1				24				3		
						1		16	15			4		
1				1		20		10				5		
2		1				1		20				6		
6	4	2		6		10	2326	137		6		7		
44		21		24		2017		177		48		8		Also 125 "other cars."
												9		
69		82		43		1618		1450		2186				
6		4		4		32		70		150				
17		15		4		178		125						
111	9	122	*12	90	*10	6305	*255	2611	*91	379		10	*Special trust. Also 340 vans, tool cars, snow ploughs, etc., owned, and 18 special trust.	
1		1		2		4		16				11		
3		3		4				4				12		
1		3		3		24		80				13		
								32				14		
1		2						1				15		
3								40				16		
2				2		2		26		110		17		
												18		
		1						9				19		
2		1		1		2		10				20		
9				3		30		12				21		
4				3		14		56				22		
												23		
4				2		8		42				24		
366		230		240		13744		5818				25		
656	13	486	14	429	16	24020	2581	10814	106	2879				

No. 3.—SUMMARY STATEMENT of the different

Number.	Name of Railway.	Length of Line.		Number of Engines.		Number of Sleeping Cars.		Number of Palace or Drawing Room Cars.	
		Completed.	Under Construction.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.
	Brought forward.....	10180.23	312.50	1440	30	67	8	2	
26	Great Eastern.....	6.50	60.00						
27	Great North-West Central.....		50.00						
28	Great Northern.....	7.84			1				
29	Guelph Junction.....	15.00			2				
30	Harvey Branch.....	3.00		1					
31	International.....	81.66		3	1				
32	Irondale, Bancroft and Ottawa.....	10.00		1					
33	Joggins.....	13.00		1					
34	Keut Northern.....	27.00		2					
35	Kingston and Pembroke.....	112.50		11					
36	L' Assomption.....	3.50		1					
37	Lake Temiskaming Colonization Railway Co.....	6.00		1					
38	Leamington and St. Clair.....	14.00		2					
39	Manitoba and North-Western.....	192.02							
	Saskatchewan and Western.....	15.47		7	1				
40	Massawippi Valley.....	34.00							
41	Montreal and Lake Maskinonge.....	5.00	8.00		1				
42	Montreal and Sorel.....	44.67		2	1				
43	Montreal and Vermont Junction.....	23.60							
44	Napance, Tamworth and Quebec.....	28.50		2					
45	New Brunswick.....	174.00							
	New Brunswick and Canada.....	127.00							
	St. John and Maine.....	92.00		46					
	Fredericton.....	22.50							
46	New Brunswick and Prince Edward.....	36.00		3					
47	Northern and Western of New Brunswick.....	116.00		6					
48	North-Western Coal and Navigation Co.....	109.50		8					
49	Nova Scotia Central.....		76.00						
50	Nosbonsing and Nipissing.....	5.50		1					
51	Ottawa and Gatineau Valley.....		3.00						
52	Pontiac Pacific Junction.....	71.00	14.00	4					
53	Qu'Appelle, Long Lake and Saskatchewan.....	23.00							
54	Quebec and Lake St. John.....	195.00		11	1				
55	Quebec Central.....	154.00		10					
56	Quebec, Montmorenci and Charlevoix.....	21.00		1					
57	Stanstead, Shefford and Chambly.....	43.00		6					
58	South Eastern.....								
	Montreal, Portland and Boston.....	260.00		30				2	
	St. Lawrence and Lake Champlain Junction.....								
59	St. Catharines and Niagara Central.....	12.35		1					
60	St. John Bridge and Railway Extension.....	1.75							
61	St. Lawrence, Lower Laurentian and Saguenay.....	22.00		1					
62	St. Louis, Richibucto and Buctouche.....	7.00							
63	St. Martin's and Upham.....	29.12		1	1				
64	Temiscouata.....	81.20							
65	Thousand Islands.....	3.15		1					
66	Waterloo and Magog.....	39.00							
	Missisquoi Valley.....	10.10							
67	Western Counties.....	67.00		4					
68	Windsor and Annapolis.....	84.00							
	Windsor Branch.....	32.00		10					
69	Winnipeg and Hudson Bay.....	40.00							
70	Wood Mountain and Qu'Appelle.....		17.00						
		12,701.66	540.50	1618	39	67	8	4	

descriptions of Rolling Stock—*Concluded.*

Number of First Class Cars.		Number of Second Class and Emigrant Cars.		Number of Baggage, Mail and Express Cars.		Number of Cattle and Box Freight Cars.		Number of Flat-form Cars.		Number of Hopper and Dumping Cars.		Remarks.
Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	Owned.	Hired.	
Number.												
656	13	486	14	429	16	24020	2581	10814	106	2879		
	1				1							26
												27
												28
											28	29
												30
2				1		2		28				31
		1				2						32
1		1				1		6				33
1				2		1		14				34
6		2		4		25		204				35
1												36
		1						9				37
1								10				38
5		4		5		107		65				39
												40
												41
	2		1		1			6	8			42
												43
2								20				44
												45
28		22		16		472		736				46
1		1				2						47
2		2				12		76				48
2		2				18		2		178		49
												50
								35				51
1		2		1		5		35		20		52
												53
3		7		3		28		135				54
5		7		6		75		168				55
								15				56
4				2								57
9		8		6	4	61	371	248	100	50		58
2								5				59
												60
												61
												62
	1				1							63
												64
1												65
												66
3		2		2		17		57				67
6		5		6		70		72		20		68
												69
												70
742	17	553	15	483	23	24918	2952	12750	242	3147		

Rolling stock furnished by lessees (Passumpsic Ry.)

Operated by equipment of Central Vermont.

Operated by the N. B. Ry. Co.

Operated by equipment of Kent Northern.

Operated by equipment of Stanstead, Shefford and Chambly Ry.

No. 4.—SUMMARY STATEMENT of the Operations of the

Number.	Name of Railway.	Mileage.	TRAIN MILEAGE.			
			Passenger Trains.	Freight Trains.	Mixed Trains.	Total Train Mileage.
1	Albert.....	52·00	256	1,740	26,592	28,588
2	Bay of Quinté and Navigation Co.....	3·50	.....	280	15,337	15,617
3	Suctouche and Moncton.....	32·00	.....	1,600	6,656	8,256
4	Canada Atlantic.....	130·30	191,928	180,326	30,466	402,720
5	Canada Southern.....	362·44	1,014,379	1,923,479	137,788	3,075,646
6	Canadian Government Railways—					
	Intercolonial.....	894·00	951,838	3,987,415	Ft. & Mix.	4,939,253
	Prince Edward Island.....	210·60	72,948	167,262	do	240,210
	Eastern Extension.....	80·00	51,363	33,744	do	85,107
7	Canadian Pacific.....	3415·30				
	Atlantic and North-West... ..	44·60				
	North Shore.....	206·10				
	St. Lawrence and Ottawa.. ..	56·50				
	Toronto, Grey and Bruce... ..	183·70				
	Ontario and Quebec	334·30	4,661·70	3,633,789	5,702,948	740,679
	Credit Valley.....	175·20				10,077,416
	West Ontario Pacific.....	26·60				
	Manitoba South-Western, Colonization.....	211·20				
8	Caraquet.....	68·00	.....	.....	25,300	25,300
9	Carillon and Grenville.....	13·00	8,550	.....	550	9,100
10	Central Ontario	104·00	20,972	29,600	66,356	116,928
11	Chatham Branch	11·00	.....	.....	28,024	28,024
12	Cobourg, Blairton and Marmora	18·00	.....	.....	7,200	7,200
13	Cumberland Railway and Coal Co.....	32·00	.....	.....	125,173	125,173
14	Drummond County.....	13·00	.....	9,800	.....	9,800
15	Elgin, Petitediac and Havelock.....	26·50	.....	.....	16,800	16,800
16	Erie and Huron.....	73·12	42,737	23,691	39,896	106,324
17	Esquimalt and Nanaimo.....	78·00	.....	.....	.....	110,000
18	Grand Southern.....	82·50	.....	4,563	51,645	56,208
19	Grand Trunk.....	894·25				
	Buffalo and Lake Huron... ..	162·00				
	Grand Trunk, Georgian Bay and Lake Erie.....	172·75				
	Great Western.....	539·53				
	London and Port Stanley.. ..	23·66				
	Wellington, Grey and Bruce.....	168·35				
	London, Huron and Bruce.. ..	68·89				
	Brantford, Norfolk and Pt. Burwell.....	34·74	3,092·94	4,730,343	7,365,623	2,231,565
	Midland.....	165·75				14,327,531
	Toronto and Nipissing.....	111·50				
	Grand Junction.....	87·75				
	Whitby, Port Perry and Lindsay.....	46·50				
	Victoria.....	53·25				
	Northern & North Western	381·90				
	Northern and Pacific Junc.. ..	111·37				
	Madoc to Bridgewater	8·50				
	Montreal & Champlain Ju.. ..	62·25				
20	Great Northern.....	7·84	.....	.....	5,008	5,008
21	International.....	81·66	44,362	42,044	10,902	97,308
22	Joggias	13·00	.....	4,500	.....	4,500
23	Kent Northern.....	27·00	.....	.....	18,500	18,500
24	Kingston and Pembroke.....	112·50	95,000	.....	131,000	226,000
25	L'Assomption	3·50	.....	.....	.....	6,370
	Carried forward.....	10284·10	10,858,463	19,478,615	3,715,437	34,168,887

Year and Mileage, for the Year ended 30th June, 1838.

Engine Mileage.	Total Number of Passengers Carried.	Tons of Freight of 2,000 lbs. Handled.	Average rate of Speed of Passenger Trains. Miles per Hour.	Average rate of Speed of Freight Trains. Miles per Hour.	Number.	Remarks.
29,202	10,515	20,934	15	12	1	Return of 1887. For five months.
15,617	9,340	29,905	15	10	2	
8,256	5,000	2,480	20	16	3	
555,150	134,003	348,632	35	15	4	
3,925,742	552,325	2,365,590	35	15	5	
5,936,035	996,194	1,275,995	30	15	6	
306,924	131,246	59,603	20	14		
93,400	43,970	12,828	30	15		
13,247,641	2,135,735	2,321,957	22	14	7	
25,300	3,500	11,195	18	18	8	
10,400	.....	250	25	18	9	
116,928	55,826	40,143	20	16	10	
31,624	12,349	12,767	30	.....	11	
7,200	3,000	16,000	15	.....	12	
.....	18,645	433,380	15	15	13	
12,000	400	29,295	.....	20	14	
18,450	11,250	18,047	.....	12	15	
140,104	92,442	66,375	25	18	16	
110,000	26,160	17,275	20	12	17	
57,708	11,200	12,774	22	22	18	
18,024,544	5,855,439	6,901,874	30	15	19	
5,008	.....	3,956	.....	.....	20	
97,308	32,370	51,872	22	10	21	
5,000	.....	18,663	.....	10	22	
18,500	5,320	9,539	18	.....	23	
372,000	59,446	126,355	25	18	24	
6,370	7,556	289	15	15	25	
43,076,411	10,213,231	14,206,973				

SUMMARY STATEMENT of the Operations

Number.	Name of Railway.	Mileage.	TRAIN MILEAGE.				
			Passenger Trains.	Freight Trains.	Mixed Trains.	Total Train Mileage.	
	Brought forward.....	10284·10	10,858,465	19,478,615	3,715,437	34,168,887	
26	Lake Temiskaming Colonization Rail- way Co.....	6·00					
27	Leamington and St. Clair.....	14·00	9,720		4,860	14,580	
28	Manitoba and North-Western.....	207·49	34,952	26,792	33,613	95,357	
29	Massawippi Valley.....	34·00	58,635	92,632		151,267	
30	Montreal and Sorel.....	44·67			27,000	27,000	
31	Montreal and Vermont Junction.....	23·60	59,936	101,492	7,062	168,490	
32	Napanee Tamworth and Quebec.....	28·50			39,328	39,328	
33	New Brunswick.....	174·00					
	New Brunswick and Can- ada.....	127·00	415·50	294,003	373,194	445,500	1,112,697
	St. John and Maine.....	92·00					
	Fredericton.....	22·50					
34	New Brunswick and Prince Edward....	36·00	4,504		22,390	26,894	
35	Northern & Western of New Brunswick..	116·00		20,800	72,616	93,416	
36	North-Western Coal and Navigation Co..	109·50			171,457	171,457	
37	Nosbonsing and Nipissing.....	5·50		14,000		14,000	
38	Pontiac Pacific Junction.....	71·00		2,600	37,120	39,720	
39	Quebec and Lake St. John.....	54·00	45,610	63,615	Ft. & Mix.	109,225	
40	Quebec Central.....	154·00	92,083	95,266	17,370	204,719	
41	South Eastern.....	152·00					
	Montreal, Portland and Bos- ton.....	45·00	260·00	202,907	320,164	In fore- going.	523,071
	St. Lawrence and Lake Champlain Junction.....	63·00					
42	Stanstead, Shefford and Chambly.....	43·00	48,840	34,050	18,912	101,802	
43	St. John Bridge and Railway Extension	1·75					
44	St. Martin's and Upham.....	29·12			13,500	13,500	
45	Thousand Islands.....	3·15	11,697	4,382	Ft. & Mix.	16,079	
46	Waterloo and Magog.....						
	Missisquoi Valley.....	39·00	37,016	23,004	10,583	70,603	
47	Western Counties.....	67·00		1,228	43,272	44,500	
4	Windsor and Annapolis.....	84·00	116·00	101,316		184,614	
	Windsor Branch.....	32·00			83,298		
	Totals.....	12,162·88	11,859,684	20,651,834	4,763,318	37,391,266	

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

Engine Mileage.	Total Number of Passengers Carried.	Tons of Freight of 2,000 lbs Handled.	Average rate of Speed of Passenger Trains. Miles per Hour.	Average rate of Speed of Freight Trains. Miles per Hour.	Number.	Remarks.
43,076,411	10,213,231	14,206,973	.....	.....
.....	3,931	1,023	.....	.....	26	
14,580	8,303	7,631	20		27	
166,553	17,286	58,662	27	15	28	
151,267	50,956	100,914	24	12	29	
27,000	34,310	6,183	23	.....	30	
163,490	98,411	723,704	30	12	31	
39,328	29,423	32,306	20	.....	32	
1,113,966	273,873	310,636	25	12	33	
39,710	13,350	15,219	18	15	34	
93,416	13,637	45,737	20	15	35	
173,057	1,608	95,186	14	14	36	
15,500	.....	297,500	.....	25	37	350,000 sawlogs.
41,536	19,981	11,596	30	20	38	
110,372	66,385	60,900	20	12	39	
228,383	84,780	97,690	25	15	40	
550,264	177,612	214,121	.....	.....	41	
101,802	114,752	743,337	23	12	42	
.....	.....	.....	.....	.....	43	Operated by New Brunswick Ry.
14,500	3,208	5,524	15	15	44	
16,079	20,614	10,949	.....	.....	45	
70,603	24,614	37,733	23	12	46	
53,671	30,795	21,238	22	15	47	
222,741	115,731	67,997	22	14	48	
46,489,229	11,416,791	17,172,759				

No. 5 — SUMMARY STATEMENT of Description of

Number.	Name of Railway.	Mileage.	Flour.		Grain.		Live
			Barrels.	Tons.	Bushels.	Tons.	No.
1	Albert	52·00	3,849	385	11,231	191	873
2	Bay of Quinté and Navigation Co.....	3·50	24,064	2,407	229,068	6,841	6
3	Buctouche and Moncton.....	32·00	200	20	620	60	.....
4	Canada Atlantic	130·30	110,980	11,098	3,344,200	83,605	12,214
5	Canada Southern	362·44	1,847,140	184,714	11,849,823	253,644	844,830
6	Canadian Government Railways—						
	Intercolonial	894·00	845,750	84,575	1,211,540	23,645	90,439
	Prince Edward Island.....	210·60	18,241	1,824	456,068	7,909	10,630
	Eastern Extension	80·00	26,088	2,609	7,495	352	8,163
7	Canadian Pacific	3,415·30					
	Atlantic and North-West	44·60					
	North Shore	206·10					
	St. Lawrence & Ottawa.....	56·50					
	Toronto, Grey and Bruce	183·70					
	Ontario and Quebec.....	334·30					
	Credit Valley.....	175·20					
	West Ontario Pacific.....	26·60					
	Manitoba, South-Western Colonization.....	211·20					
		4,661·70	1,163,786	116,679	17,236,487	453,247	217,471
8	Caraget	68·00	6,000	600	500	15	50
9	Carillon and Grenville	13·00	200	20	.....	.....	150
10	Central Ontario.....	104·00	14,900	1,490	157,000	3,925	1,240
11	Chatham Branch.....	11·00	21,150	2,115	3,561	107	310
12	Cobourg, Blairton and Marmora	18·00	.....	.....	4,000	90	.....
13	Cumberland Railway and Coal Co.....	32·00	10,088	1,008	8,236	140	4
14	Drummond County	13·00	1,500	150	5,400	120	.....
15	Elgin, Petittcodiac and Havelock	26·50	5,150	501	14,180	236	2,369
16	Erie and Huron	73·12	101,977	11,000	133,341	4,046	6,187
17	Esquimalt and Nanaimo.....	78·00	2,784	267	3,540	108	78
18	Grand Southern	82·50	6,660	660	9,056	184	234
19	Grand Trunk	894·25					
	Buffalo and Lake Huron	162·00					
	Grand Trunk, Georgian Bay and Lake Erie.....	172·75					
	Great Western	539·53					
	London and Port Stanley.....	23·66					
	Wellington, Grey & Bruce.....	168·35					
	London, Huron and Bruce	68·89					
	Brantford, Norfolk & Port Burwell	34·74					
	Midland	165·75					
	Toronto and Nipissing.....	111·50					
	Grand Junction.....	87·75					
	Whitby, Port Perry and Lindsay	46·50					
	Victoria.....	53·25					
	Northern.....	208·00					
	Northern & Pacific Junc.....	111·37					
	Hamilton & North-Western	173·90					
	Madoc to Bridgewater	8·50					
	Montreal & Champlain Jun.....	62·25					
		3,092·94	5,499,560	549,956	40,294,480	1,007,362	1,262,766
20	Great Northern	7·84	4,600	460	.....	.....	.....
21	International	81·66	12,331	1,232	32,634	758	2,154
22	Joggins	13·00	750	75	.....	.....	.....
23	Kent Northern	27·00	5,566	557	19,250	480	314
24	Kingston and Pembroke.....	112·50	2,550	255	68,000	2,040	210
25	L'Assomption.....	3·50	1,500	144	.....	.....	.....
	Carried forward.....	10284·10	9,736,357	974,801	75,099,710	1,849,105	2,460,722

Freight Carried, for the Year ended 30th June, 1888

Stock.	Logs of all kinds except Firewood.		Firewood.		Manu- factured Goods.	All other Articles.	Total Weight Carried.	Number.	Remarks.
	Tons.	Feet.	Tons.	Cords.	Tons.	Tons.	Tons.		
398	5,862,789	8,913	2,334	3,607	708	6,732	20,934	1	Return of 1887.
5	5,337,000	7,138	840	1,008	4,338	8,168	29,905	2	For five months.
.....	145,200	1,840	300	400	55	105	2,480	3	
2,512	9,756,000	135,500	22,107	37,246	2,192	76,479	348,632	4	
167,575	23,162,400	32,170	.....	.....	91,875	1,635,612	2,365,590	5	
12,737	196,444,819	245,551	16,046	32,092	278,893	598,502	1,275,995	6	
1,497	3,611,442	4,962	2,813	5,310	38,101	.....	59,603	.....
1,663	1,907,280	2,649	.....	.....	1,974	3,581	12,828	.....
62,654	312,982,269	429,945	118,059	176,097	517,678	565,657	2,321,957	7	
25	4,000,000	5,000	900	1,280	.....	4,275	11,195	8	
30	.....	.....	.....	.....	150	50	250	9	
510	5,600,000	9,100	2,650	5,296	4,120	15,702	40,143	10	
150	1,363,036	2,094	636	954	5,292	2,055	12,767	11	
.....	10,000,000	14,860	400	800	.....	250	16,000	12	
2	8,136,000	10,170	.....	.....	5,285	*416,775	433,380	13	*Coal.
.....	3,267,000	4,500	15,625	9,375	150	15,000	29,295	14	
320	9,262,800	12,865	300	600	627	2,898	18,047	15	
977	17,930,732	25,505	433	637	6,642	17,568	66,375	16	
33	2,074,800	3,102	5,000	6,560	2,954	4,251	17,275	17	
63	4,132,000	5,945	649	982	1,565	3,375	12,774	18	
204,415	670,555,815	951,143	143,512	264,063	899,337	3,025,598	6,901,874	19	
.....	750,000	996	1,000	1,200	50	250	2,956	20	
712	16,600,550	26,009	570	855	5,706	16,600	51,872	21	
.....	.....	.....	.....	.....	522	18,066	18,663	22	
176	500,600	627	1,620	2,763	2,420	2,516	9,539	23	
105	47,875,000	71,812	8,280	15,315	16,743	20,085	126,355	24	
.....	43,200	60	.....	.....	29	56	289	25	
456,559	1,361,300,732	2,012,456	344,074	566,440	1,887,406	6,460,206	14,206,973		

No. 5.—SUMMARY STATEMENT of Description

Number.	Name of Railway.	Mileage.	Flour.		Grain.		Live
			Barrels.	Tons.	Bushels.	Tons.	No.
	Carried forward.....	10284·10	9,736,357	974,801	75,099,710	1,849,105	2,460,722
26	Lake Temiskaming Colonization Rail- way Co.....	6·00	1,640	164	9,354	159	.....
27	Leamington and St. Clair.....	14·00	171	17	31,345	778	171
28	Manitoba & North-Western.. 192·02 } Saskatchewan & Western. 15·47 }	207·49	27,020	2,702	1,497,985	41,184	1,262
29	Massawippi Valley.....	34·00	.....	650	.....	5,520	.....
30	Montreal and Sorel.....	44·67	.....	.....	.....	.....	.....
31	Montreal and Vermont Junction.....	23·60	545,771	53,616	7,963,833	67,148	173,294
32	Napanee, Tamworth and Quebec.....	28·50	5,600	560	23,400	1,170	800
33	New Brunswick..... 174·00 } New Brunswick & Canada 127·00 } St. John and Maine..... 92 00 } Fredericton..... 22·50 }	415·50	72,060	7,206	81,660	1,836	7,810
34	New Brunswick and Prince Edward... 36·00		10,379	1,038	9,444	196	1,132
35	Northern & Western of New Brunswick 116·00		33,116	3,312	26,342	461	384
36	North-Western Coal & Navigation Co 109·50		11,756	587	11,622	197	233
37	Nosbonsing and Nipissing..... 5·50		.....	.....	.....	.....	.....
38	Pontiac Pacific Junction..... 71·00		8,133	813	25,578	820	1,992
39	Quebec and Lake St John..... 54·00		6,720	672	18,000	432	120
40	Quebec Central..... 154·00		50,390	5,039	70,245	1,561	6,765
41	South Eastern..... 152·00 } Montreal, Portland & Bos- ton..... 45·00 } St. Lawrence and Lake Champlain Junction..... 63·00 }	260·00	106,400	10,640	368,640	8,192	29,500
42	Stanstead, Shefford and Chambly..... 43·00		562,116	55,218	8,035,584	167,166	173,412
43	St. John Bridge & Railway Extension. 1·75		.....	.....	.....	.....	.....
44	St. Martin's and Upham..... 29·12		1,279	128	9,890	168	12
45	Thousand Islands..... 3·15		.....	.....	.....	.....	1,515
46	Waterloo and Magog..... 39·00 } Missisquoi Valley..... }	39·00	4,122	404	18,168	545	24
47	Western Counties..... 67·00		8,797	880	4,611	78	176
48	Windsor and Annapolis..... 84·00 } Windsor Junction..... 32·00 }	116·00	48,172	4,817	.....	.....	13,005
		12,162·88	11,239,999	1,123,264	93,305,411	2,146,716	2,872,229

of Freight Carried, &c.—*Concluded.*

Stock.	Logs of all kinds except Firewood.		Firewood:		Manu- factured Goods.	All other Articles.	Total Weight Carried.	Number.	Remarks.
	Tons.	Feet.	Tons.	Cords.					
456,559	1,361,300,732	2,012,456	344,074	566,440	1,887,406	6,460,206	14,206,973		
117	183,000	353	33	65	182	518	1,023	26	
762	2,611,000	4,954	496	856	232	6,069	7,631	27	
1,045		16,750				2,161	58,662	28	
						76,949	100,914	29	
28,616	35,905,350	44,883	24	32	213,876	315,533	6,183	30	
369	415,000	4,053	8,741	13,278	6,816	6,060	723,704	31	
1,796	45,500,000	45,500	2,521	4,285	77,600	172,413	310,636	33	
88	6,334,000	9,168	801	1,201	800	2,728	15,219	34	
209	11,032,895	21,620	2,869	4,000	2,315	13,820	45,737	35	
127	449,315	674			1,686	91,915	95,186	36	
						297,500	*297,500	37	*Sawlogs, 350,000.
165	522,000	702	2,650	4,198	2,045	2,853	11,596	38	
72	11,986,000	15,156	25,120	33,492	888	10,188	60,900	39	
1,353	24,293,520	33,742	11,600	6,629	217	49,149	97,690	40	
5,900	47,509,049	65,487			57,980	65,922	214,121	41	
28,685	38,298,460	47,922	1,073	1,143	199,557	243,646	743,337	42	
								43	Operated by New Brunswick Railway.
1	3,394,104	3,738	137	210	689	590	5,524	44	
303	320,000	156			3,499	6,991	10,940	45	
8	7,990,840	9,988	10,244	10,903	3,821	12,064	37,733	46	
73	10,816,000	13,509	2,242	3,798	2,291	609	21,238	47	
2,669	9,144,772	11,440	1,471	2,106	14,354	32,611	67,997	48	
528,917	1,618,006,137	2,361,351	414,096	652,636	2,483,197	7,870,495	17,172,759		

No. 6.—SUMMARY STATEMENT of Earnings, for the Year ended 30th June, 1888.

Name of Railway.	Mileage.	Passenger Traffic.		Freight Traffic.		Mails and Express Freight.		Other Sources.		Total.	Remarks.
		\$	cts.	\$	cts.	\$	cts.	\$	cts.		
1 Albert.....	52-00	4,846 58		10,116 51		2,119 68		864 83		17,947 63	Return of 1887.
2 Bay of Quinte and Navigation Co.....	3-50	2,335 83		11,316 51		1,270 69		1,516 34		16,439 36	
3 Buctouche and Moncton.....	32-00	1,437 25		3,030 64						4,467 89	For 5 months.
4 Canada Atlantic.....	130-30	113,515 62		310,900 35		21,494 63		42,333 19		488,243 79	
5 Canada Southern.....	362-44	1,258,318 02		3,307,816 75		147,638 29		3,448 81		4,717,221 87	
6 Canadian Government Railways:—											
Intercolonial.....	894-00	845,041 65		1,909,842 04		157,900 16				2,912,783 85	
Prince Edward Island.....	210-10	66,943 28		80,399 79		10,630 55		390 00		158,363 62	
Eastern Extension.....	80-00	38,406 42		24,035 81		7,747 90		362 07		70,552 20	
7 Canadian Pacific.....	3,415-30										
Atlantic and North-West.....	44-60										
North Shore.....	206-10										
St. Lawrence and Ottawa.....	56-50										
Toronto, Grey and Bruce.....	183-70										
Ontario and Quebec.....	334 30										
Credit Valley.....	175-20										
West Ontario Pacific.....	26-60										
Manitoba South-Western Colonization.....	211-20										
8 Caraquez.....	68-00	2,432 75		9,199 19						11,631 94	
9 Carillon and Grenville.....	13-00	2,485 84		305 50						2,791 34	
10 Central Ontario.....	104-00	30,137 89		43,156 88		6,789 59		297 42		80,381 78	
11 Chatham Branch.....	11-00	2,837 25		11,016 98		1,184 10		2,914 00		17,952 33	
12 Cobourg, Blairton and Marmora.....	18-00	975 00		10,654 79						11,629 79	
13 Cumberland Railway and Coal Co.....	32-00	7,696 91		35,086 18		1,581 40		68,611 00		112,805 49	
14 Drummond County.....	13-00	100 00		9,700 00						9,800 00	
15 Elgin, Petittodiac and Havelock.....	26-50	3,773 78		11,476 32		696 08		957 35		16,903 53	
16 Erie and Huron.....	73-12	46,133 61		44,742 80		5,112 24		303 14		96,282 04	
17 Esquimaux and Nainaimo.....	78-00	51,088 34		20,325 81		3,906 49		1,417 66		76,737 96	
18 Grand Trunk.....	82-50	11,283 25		13,706 14		2,036 77		640 38		27,666 54	
Buffalo and Lake Huron.....	894 25										
Grand Trunk, Georgian Bay and Lake Erie.....	162-00										
Great Western.....	172-75										
London and Port Stanley.....	23-66										
Wellington, Grey and Bruce.....	168-35										
London, Huron and Bruce.....	68-89										
Brantford, Norfolk & Port Burwell.....	31 74										
Midland.....	165-75										
Total	3,092-94	5,656,813 31		10,859,182 20		646,487 62		78,894 58		17,241,377 61	

Toronto and Nipissing.....	111.50	4,427 31	4,769 51	139 76	.....	9,276 58
Grand Junction.....	87.75	27,959 07	51,491 31	2,396 01	66 50	81,912 89
Whitby, Port Perry and Lindsay..	46 50	104 47	6,327 27	.....	.....	6,431 74
Victoria.....	53 25	4,004 24	7,667 68	942 51	.....	12,614 43
Northern.....	208.00	45,997 00	112,227 00	8,741 00	24,482 00	191,447 00
Northern and Pacific Junction.....	111.37	1,263 90	144 14	20 83	23 94	1,452 81
Hamilton and North-Western.....	173.90	7,336 49	15,913 00	.....	70 00	23,319 49
Madoc to Bridgewater.....	8.50	2,795 14	4,019 25	.....	.....	6,815 39
Montreal and Champlain Junction	62.25	34,289 50	111,172 18	6 281 18	7,276 62	159,019 48
Great Northern.....	7.84	55,768 96	86,801 62	1,971 90	1,000 00	145,542 48
International.....	81.66	13,635 05	3,330 13	1,014 09	.....	17,879 27
21 Joggins.....	13.00	49,631 39	115,906 39	7,266 40	.....	172,204 18
22 Kent Northern.....	27.00	8,673 78	18,626 69	3,539 38	75 75	30,915 60
23 Kingston and Pembroke.....	112.50	285,540 83	497,379 13	32,197 71	40,985 23	856,102 90
24 L'Assomption.....	3.50	5,941 87	8,322 27	1,368 00	11 40	15,643 54
25 Lake Teniskaming Colonization	6.00	15,746 82	26,252 93	203 60	2,977 64	45,180 99
26 Leamington and St. Clair.....	14.00	8,340 28	218,435 63	3,422 47	.....	230,198 38
27 Manitoba and North-Western.....	192.02	5.50	37,720 60	.....	.....	37,720 60
28 Saskatchewan and Western.....	15.47	14,812 17	15,605 73	1,061 72	94 18	31,473 80
29 Massawippi Valley.....	34.00	22,683 27	60,219 51	3,010 82	329 00	86,242 60
30 Montreal and Sorel.....	44.67	74,186 83	124,890 73	9,418 14	2,987 23	211,482 93
31 Montreal and Vermont Junction.....	23.60	180,255 73	303,768 46	17,741 62	22,572 61	524,638 42
32 Napanee, Yamworth and Quebec..	28.60	5,941 87	8,322 27	1,368 00	11 40	15,643 54
33 New Brunswick.....	174.00	15,746 82	26,252 93	203 60	2,977 64	45,180 99
New Brunswick and Canada.....	127.00	8,340 28	218,435 63	3,422 47	.....	230,198 38
St. John and Maine.....	92.00	5.50	37,720 60	.....	.....	37,720 60
Frederton.....	22 50	14,812 17	15,605 73	1,061 72	94 18	31,473 80
34 New Brunswick and Prince Edward..	36.00	22,683 27	60,219 51	3,010 82	329 00	86,242 60
35 Northern and Western of New Brunswick.....	116.90	74,186 83	124,890 73	9,418 14	2,987 23	211,482 93
36 North-Western Coal and Navigation Co.....	109.50	180,255 73	303,768 46	17,741 62	22,572 61	524,638 42
37 Nosbousing and Nipissing.....	5.50	5,941 87	8,322 27	1,368 00	11 40	15,643 54
38 Pontiac Pacific Junction.....	71.00	15,746 82	26,252 93	203 60	2,977 64	45,180 99
39 Quebec and Lake St. John.....	54.00	8,340 28	218,435 63	3,422 47	.....	230,198 38
40 Quebec Central.....	154.00	14,812 17	15,605 73	1,061 72	94 18	31,473 80
41 South Eastern.....	152.00	22,683 27	60,219 51	3,010 82	329 00	86,242 60
Montreal, Portland and Boston... 45.00		74,186 83	124,890 73	9,418 14	2,987 23	211,482 93
L'ke Champlain & St Lawrence J'n 63.00		180,255 73	303,768 46	17,741 62	22,572 61	524,638 42
42 Stanstead, Shefford and Chambly.....	43.00	26,419 19	44,276 05	3,540 08	.....	74,235 32
43 St. John Bridge and Railway Extension..	1.75	19,399 46	28,061 84	853 25	.....	48,314 55
44 St. Martin's and Upham.....	29.12	1,816 61	2,957 62	.....	.....	4,774 13
45 Thousand Islands.....	3.15	4,299 32	5,941 15	1,572 42	1,576 68	13,369 57
46 Waterloo and Magog.....	39.00	13,796 42	19,539 21	2,829 04	.....	36,164 67
Missisquoi Valley.....		31,009 03	19,210 64	3,578 50	391 39	54,189 56
47 Western Counties.....	67.00	101,802 80	113,498 00	11,639 83	628 06	227,568 79
48 Windsor and Annapolis.....	84.00	12,744,636 66	26,410,084 00	1,627,731 84	1,376,699 25	42,159,152 65
Windsor Junction.....	32.00	12,162.88				

No. 7.—SUMMARY STATEMENT of Operating Expenses, for the Year ended 30th June, 1888.

Name of Railway.	Mileage.	Maintenance of Line, Buildings, &c.		Working and Repairs of Engine.		Working and Repairs of Cars.		General Operating Expenses.		Total.	Remarks.
		\$	cts.	\$	cts.	\$	cts.	\$	cts.		
1 Albert.....	52-00	10,714	56	5,607	89	2,156	47	5,927	43	\$ 24,406 35	Return of 1887.
2 Bay of Quinté and Navigation Co.....	3-50	2,443	38	5,685	99	354	11	5,028	49	13,511 93	For 5 months.
3 Buctouche and Moncton.....	32-08	1,865	07	40	08	138	52	6,412	41	8,456 08	
4 Canada Atlantic.....	130-30	51,904	29	117,171	97	19,125	70	93,290	40	281,492 36	
5 Canada Southern.....	362-44	428,710	89	823,239	50	935,735	99	1,296,635	49	2,884,321 87	
6 Canadian Government Railways:—											
Intercolonial.....	894-00	811,225	31	1,135,325	00	518,888	99	803,045	26	3,268,484 56	
Prince Edward Island.....	210-10	91,653	22	66,390	76	16,169	07	55,426	90	229,639 95	
Eastern Extension.....	80-00	43,845	04	17,566	01	6,037	29	23,716	39	90,954 73	
7 Canadian Pacific.....											
Atlantic and Northwest.....	44-60										
North Shore.....	206-10										
St. Lawrence and Ottawa.....	56-50										
Toronto, Grey and Bruce.....	183-70										
Ontario and Quebec.....	334-30										
Credit Valley.....	175-20										
West Ontario Pacific.....	26-60										
Manitoba and South-Western Colonization.....	211-20										
8 Caraquez.....	68-00	4,570	40	4,030	00			2,721	54	11,311 94	No details given.
9 Carillon and Grenville.....	13-00									4,318 15	
10 Central Ontario.....	104-00	27,383	28	19,152	06	4,532	24	27,480	68	78,598 26	
11 Chatham Branch.....	11-00	1,356	71	4,556	18			4,781	10	7,492 89	
12 Cobourg, Blairton and Marmora.....	18-00					4,706	30	8,175	92	60,856 74	
13 Cumberland Ry. and Coal Co.....	13-00	2,078	17	3,081	24	300	00	2,621	40	8,080 81	
14 Drummond County.....	23-50	1,916	92	3,273	29	356	29	2,013	41	7,589 91	
15 Elgin, Petittodiac and Havelock.....	73-12	12,951	80	22,443	69	2,713	62	23,483	47	61,592 58	
16 Erie and Huron.....	78-00	29,763	84	22,492	68	6,394	66	27,566	32	85,710 50	
17 Esquimaux and Nanaimo.....	82-50	19,443	81	15,948	79	1,798	42	\$ 1,176 24		46,367 26	
18 Grand Southern.....											
Buffalo and Lake Huron.....	894-25										
Grand Trunk, Georgian Bay and Lake Erie.....	162-00										
Great Western.....	172-75										
London and Port Stanley.....	539-53										
Wellington, Grey and Bruce.....	23-66										
London, Huron and Bruce.....	168-35										
Brantford, Norfolk and Port Burwell.....	68-89										
Midland.....	34-74										
	165-75										
	3,092 94	2,435,452 77		3,996,853 97		1,220,235 95		4,306,384 90		11,958,927 59	

No. 8.—SUMMARY OF ACCIDENTS

Number.	Name of Railway.	Mileage.	Passengers, Employés, or Others.	Fell from Cars or Engines.		Jumping on or off Trains or Engines when in motion.	
				Killed.	Injured.	Killed.	Injured.
1	Albert (Return of 1887)	52·00					
2	Bay of Quinté and Navigation Co.	3·50	Others				
3	Buetoche and Moncton	32·00					
4	Canada Atlantic	130·30	{ Passengers				
			{ Employés				
			{ Others				
5	Canada Southern	362·44	{ Passengers	2	2		2
			{ Employés	4	5		4
			{ Others	1	1		1
6	Canadian Government Railways :—		{ Passengers	2	1	1	1
	Intercolonial	894 00	{ Employés	2	17		5
			{ Others		1	4	
	Eastern Extension	80·00	Others				
7	Prince Edward Island	210·60	Employés		1		
	Canadian Pacific.....3,415·30						
	Atlantic and North-West	44·60					
	North Shore	206·10					
	St. Lawrence and Ottawa.....	56·50	{ Passengers	2	1	2	5
	Toronto, Grey and Bruce	183 70	{ Employés	8	21	3	13
	Ontario and Quebec	334·30	{ Others		2	1	3
	Credit Valley	175·20					
	West Ontario Pacific	26·60					
	Manitoba South-Western Colonization.	211·20					
8	Caraquet	68·00	{ Passengers				
			{ Employés				
9	Carillon and Grenville.....	13·00					
10	Central Ontario	104·00	{ Employés				
			{ Others				
11	Chatham Branch	11·00					
12	Cobourg, Blairton and Marmora	18·00					
13	Cumberland Railway and Coal Co.	32·00	Employés				
14	Drummond County	13·00					
15	Elgin, Petitoodiac and Havelock	26·50					
16	Erie and Huron	73·12	{ Employés	1			
			{ Others				
17	Esquimalt and Nanaimo	78·00					
18	Grand Southern	82·50					
19	Grand Trunk	894·25					
	Buffalo and Lake Huron	162·00					
	Grand Trunk, Georgian Bay and Lake Erie	172·75					
	Great Western.....	539·53					
	London and Port Stanley.....	23·66					
	Wellington, Grey and Bruce	163·35					
	London, Huron and Bruce.....	68·82					
	Brantford, Norfolk and Port Burwell ..	34·74					
	Midland	165·75	{ Passengers	4	3	7	
	Toronto and Nipissing	111·50	{ Employés	7	25	2	8
	Grand Junction	87·75	{ Others	4	1	3	16
	Whitby, Port Perry and Lindsay	46·50					
	Victoria	53·25					
	Northern	208 00					
	Northern and Pacific Junction	111 37					
	Hamilton and North-Western.....	173·90					
	Madoc to Bridgewater	8·50					
	Montreal and Champlain Junction.....	62·25					
	Carried forward	10,038·60		30	82	19	65

No. 8.—SUMMARY OF

Number.	Name of Railway.	Mileage.	Passengers, Employés, or Others.	Fell from Cars or Engines.		Jumping on or off Trains or Engines when in motion.	
				Killed.	Injured.	Killed.	Injured.
	Brought forward.....	10,038 60		30	82	19	65
20	Great Northern	7 84					
21	International	81 66					
22	Joggins	13 00					
23	Kent Northern	27 00	Others				
24	Kingston and Pembroke	112 50	{ Passengers				
			{ Employés	3			
			{ Others				
25	L'Assomption	3 50					
26	Leamington and St. Clair	14 00					
27	Lake Temiskaming Colonization Railway Co.	6 00					
28	Manitoba and North-Western	192 02 }	207 49	Employés	1	1	
	Saskatchewan and Western	15 47 }					
29	Massawippi Valley	34 00					
30	Montreal and Sorel	44 67	Employés				
31	Montreal and Vermont Junction	23 60					
32	Napanee, Tamworth and Quebec	28 50	Employés.....	1			
33	New Brunswick.....	174 00 }	415 50	{ Passengers			
	New Brunswick and Canada.....	127 00 }					
	St. John and Maine	92 00 }					
	Fredericton	22 50 }					
34	New Brunswick and Prince Edward	36 00					
35	Northern and Western of New Brunswick	116 00	Others				
36	North-Western Coal and Navigation Co.	109 50	Employés				1
37	Nosbonsing and Nipissing	5 50					
38	Pontiac Pacific Junction	71 00					
39	Quebec and Lake St. John	54 00					
40	Quebec Central	154 00	{ Passengers				
			{ Employés			1	
41	South-Eastern	152 00 }	260 00	{ Passengers			
	Montreal, Portland and Boston	45 00 }					
	St. Lawrence and Champlain Junction	63 00 }					
42	Stanstead, Shefford and Chambly	43 00	{ Employés		6		1
43	St. John Bridge and Railway Extension	1 75	{ Others	1			
44	St. Martin's and Upham	29 12					
45	Thousand Islands	3 15					
46	Waterloo and Magog	39 00	Others				
	Mis-squoi Valley						
47	Western Counties	67 00					
48	Windsor and Annapolis	84 00 }	116 00				
	Windsor Junction.....	32 00 }					
	Totals.....	12,162 88		30	94	21	67

No. 9.—LINES of Railway owned by Coal and Iron Mines, for the year ended 30th June, 1888.

Name.	Length of Rail-way.	Gauge.	No. of Engines.	No. of Waggon.	Remarks.										
NOVA SCOTIA.															
Intercolonial Coal Mining Co.—															
Granton Line.....	7·00	4·8½	} 2	118	Cars furnished by Intercolonial Railway.										
Stellarton Branch.....	3·00	4·8½													
Acadia Coal Co.....	6·00	4·8½	2												
Loadonderry Iron Co.....	11·00	4·8½	3	29											
do	3·00	3·0	2	27											
Albion Mines	3·00	4·8½	3	180											
	33·00		12	354	Old Albion Railway abandoned; remainder, as stated, are branches of Intercolonial Railway.										
CAPE BRETON.															
New Cambellton.....	1·25	3·6	1	40	Rolling stock furnished by International Coal Co.										
Old Bridgeport	·50	4·8½													
General Mining Association—															
Sydney.....	4·80	4·8½	2	200											
Victoria.....	5·00	4·8½	1	98											
Sydney and Louisburg.....	43·00	3·0	3	174											
Gowrie.....	2·00	3·6	2	120											
International.....	13·00	4·8½	3	144	Also 2 passenger and 4 flats. Not running.										
Lingan.....	1·00	3·6		40											
Caledonia.....	2·25	4·8½	1	70											
	72·80		13	886											
					<table border="0"> <tr> <td style="text-align: right;">Gauge.</td> <td style="text-align: right;">Miles.</td> </tr> <tr> <td>4 feet 8½ inches.....</td> <td>55·55</td> </tr> <tr> <td>3 " 6 "</td> <td>4·25</td> </tr> <tr> <td>3 " 0 "</td> <td>46·00</td> </tr> <tr> <td>Total.....</td> <td>105·80</td> </tr> </table>	Gauge.	Miles.	4 feet 8½ inches.....	55·55	3 " 6 "	4·25	3 " 0 "	46·00	Total.....	105·80
Gauge.	Miles.														
4 feet 8½ inches.....	55·55														
3 " 6 "	4·25														
3 " 0 "	46·00														
Total.....	105·80														

No. 4.

No. 10--STATEMENT of Aid granted to Railways--Constructed and under Construction--by Governments, for the Year ended 30th June, 1888.

Name of Railway.	Loan.		Total.		Bonus.		Total.		Subscription to Shares or Bonds.		Total.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
DOMINION GOVERNMENT.												
Albert.....												
Albert Southern.....	15,000	00					14,665	45				
Bate des Chaleurs.....							51,200	00				
Brockville, Westport and Sault Ste. Marie.....							620,000	00				
Buctouche and Moncton.....							128,000	00				
Canada Atlantic.....							102,400	00				
Canada Central.....							134,400	00				
Canadian Pacific.....							1,525,250	00				
Cape Breton.....							55,172	71				
Caraqueb.....							774,541	12				
Central of New Brunswick.....							224,000	00				
Chatham Branch.....							83,512	91				
Drummond County.....							24,439	84				
Dominion Lime Company.....							16,000	00				
Eastern Extension.....							22,400	00				
Elgin, Petcodiac and Havelock.....							1,284,495	76				
Eric and Huron.....							82,653	82				
Esquimat and Nausimo.....							96,000	00				
Fredericton and St. Mary's Railway Bridge Company.....	300,000	00					750,000	00				
Grand Trunk.....	15,142,633	33										
Great Eastern.....												
Great Northern.....							128,000	00				
Guelph Junction.....							89,600	00				
Harvey Branch.....							51,200	00				
Intercolonial.....							9,600	00				
International.....							45,887	759	20			
Irondale, Bancroft and Ottawa.....							156,800	00				
Joggins.....							160,000	00				
Keut Northern.....							42,400	00				
Kingston and Pembroke.....							58,334	87				
							48,000	00				
Carried forward.....	15,457,633	33					107,818,365	68				

No. 10—STATEMENT of Aid granted to Railways by Governments—Continued.

Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscription to Shares or Bonds.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward.....	15,457,633 38		107,818,365 68			
DOMINION GOVERNMENT—Concluded.						
L'Assomption.....			11,200 00			
Lake Temiskaming Colonization.....			33,600 00			
Leamington and St. Clair.....			51,200 00			
Montreal and Lake Maskinongé.....			32,000 00			
Montreal and Champlain Junction.....			103,600 00			
Montreal and Sorel.....			72,000 00			
Napanee, Tamworth and Quebec.....			172,400 00			
New Brunswick and Prince Edward.....			118,400 00			
Northern and Western of New Brunswick.....			320,000 00			
Northern and Pacific Junction.....			1,320,000 00			
Nova Scotia Central.....			256,000 00			
Oxford and New Glasgow.....			*430,865 44			
Ottawa and Gatineau Valley.....			320,000 00			
Pontiac Pacific Junction.....			313,100 00			
Prince Edward Island.....			3,741,780 89			
Quebec and Lake John.....			861,290 00			
Quebec Central.....			211,200 00			
Quebec, Montreal, Ottawa and Occidental, Quebec to Montreal, do do Montreal to Ottawa.....			† 9,400 00			
St. Catharines and Niagara Central.....			†1,440,000 00			
St. Louis, Richibucto and Bécouche.....			22,400 00			
St. John Bridge and Railway Extension.....	483,900 00					
St. Lawrence, Lower Laurentian and Saguenay.....			217,600 00			
Temiscouata.....			486,000 00			
Toronto, Grey and Bruce.....			17,312 00			
Windsor and Annapolis.....			1,089,674 00			
West Ontario Pacific.....			256,000 00			
		15,891,533 33		120,708,388 01		
ONTARIO GOVERNMENT.						
Canada Atlantic.....			270,000 00			

Canada Central.....	.....	.....	1,479,000 00
Canada Southern.....	.....	.....	147,868 66
Central Ontario.....	.....	.....	126,500 00
Cobourg, Blairton and Marmora.....	26,000 00	.....	18,740 00
Credit Valley.....	.....	.....	531,000 00
Erie and Huron.....	.....	.....	83,000 00
Grand Junction.....	.....	.....	182,500 00
Georgian Bay and Lake Erie.....	.....	.....	336,000 00
Hamilton and North-Western.....	.....	.....	565,920 00
Kingston and Pembroke.....	.....	.....	456,483 00
London, Huron and Bruce.....	.....	.....	178,630 08
Midland.....	.....	.....	168,350 20
Northern.....	.....	.....	196,188 00
Toronto and Nipissing.....	.....	.....	105,212 00
Lake Simcoe Junction.....	.....	.....	53,000 00
Toronto, Grey and Bruce.....	.....	.....	375,282 00
Victoria.....	.....	.....	312,000 00
Wellington, Grey and Bruce.....	.....	.....	241,276 00
Whitby, Port Perry and Lindsay.....	.....	26,000 00	94,957 59
QUEBEC GOVERNMENT.			
Beite des Chaleurs.....	.....	.....	700,000 00
Great Eastern.....	.....	.....	156,000 00
International.....	.....	.....	391,122 02
Lake Champlain and St. Lawrence Junction.....	.....	.....	380,000 00
L'Assomption.....	.....	.....	7,350 00
Lévis and Kennebec.....	.....	.....	+
Missisquoi Valley.....	.....	.....	228,000 00
Montreal, Portland and Boston.....	.....	.....	197,582 00
Pontiac Pacific Junction.....	.....	.....	540,000 00
Quebec and Lake St. John.....	.....	.....	2,114,000 00
Quebec Central.....	.....	.....	681,250 00
Quebec, Montreal, Ottawa and Occidental, Quebec to Montreal.....	2,546,000 00	.....	.....
do do Montreal to Ottawa.....	1,176,956 00	.....	.....
Quebec, Montmorenci and Charlevoix.....	.....	.....	727,000 00
South-Eastern.....	.....	.....	113,400 00
Temisconata.....	.....	.....	444,000 00
Waterloo and Magog.....	.....	.....	480,000 00
.....	.....	.....	92,000 00
.....	3,722,956 00	.....	7,251,701 02
NEW BRUNSWICK GOVERNMENT.			
Albert.....	.....	.....	455,000 00
Albert Southern.....	.....	.....	48,000 00
Carried forward.....	19,640,489 33	.....	503,000 00
.....	.....	.....	133,881,096 55

5,921,007 52

7,251,701 02

133,881,096 55

† Dominion Government pays to Quebec Government 5 per cent. per annum on these two amounts. ‡ Included in Quebec Central.

No. 10.—STATEMENT of Aid granted Railways by Government—Concluded.

Name of Railway.	Loan.		Total.		Bonus.		Total.		Subscription to Shares or Bonds.		Total.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Brought forward.....			19,640,489	33			503,000	00	133,881,099	55		
NEW BRUNSWICK GOVERNMENT—Concluded.												
Buctouche and Moncton.....							96,000	00				
Caraget.....							180,000	00				
Central of New Brunswick.....							132,000	00				
Chatham Branch.....							32,000	00				
Fredericton.....							230,000	00				
Grand Southern.....							425,000	00				
Kent Northern.....							135,000	00				
New Brunswick.....							76,000	00				
New Brunswick and Canada.....							575,000	00				
New Brunswick and Prince Edward.....							108,000	00				
Northern and Western.....							321,500	00				
Petitcodiac and Elgin (Elgin, Petitcodiac and Havelock).....							107,500	00				
St. Martins and Upham.....							145,665	00				
St. John and Maine.....							|| 880,000	00				
St. Louis, Richibucto and Buctouche.....							21,000	00				
Temiscouata.....							36,000	00				
Harvey Branch.....							9,000	00				
									4,012,665	00		
										300,000	00	
NOVA SCOTIA GOVERNMENT.												
Halifax and Cape Breton Railway and Coal Co. (Eastern Extension).....							643,545	00				
Joggins.....							38,400	00				
Nova Scotia Central.....							411,119	94				
Springhill and Parrsboro' (Cumberland Railway and Coal Co.).....							144,230	00				
Western Counties.....			50,000	00			679,100	00				
											1,916,384	94
MANITOBA GOVERNMENT.												
Manitoba and North-Western.....											738,000	00
Manitoba South-Western Colonization.....											900,000	00

Saskatchewan and Western Winnipeg and Hudson Bay.....	50,000 00	.....	.....	.....	256,000 00	.....
BRITISH COLUMBIA GOVERNMENT.						
Canadian Pacific.....	.....	.....	.....	37,500 00	37,500 00	.....
Total Aid from Governments.....	.....	.....	21,379,489 33	.....	140,103,689 49	300,000 00

|| Granted to late European and North American Railway.

No. 5.

No. 10.—STATEMENT of Aid granted to Railways by Municipalities, 30th June, 1888.

Municipalities.	Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscriptions to Shares or Bonds.	Total.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
ONTARIO.							
Desoronto	Bay of Quinté and Navigation Company.....	.....	.....	5,000 00	5,000 00	.....	.....
Town of Brockville	Brockville, Westport and Sault Ste. Marie.....	.....	.....	36,000 00	.....	.....	.....
Elizabethtown.....	do .....	.....	.....	7,000 00	.....	.....	.....
Rear of Yonge and Escott.....	do .....	.....	.....	15,000 00	.....	.....	.....
Rear of Leeds and Lansdowne ..	do .....	.....	.....	5,000 00	.....	.....	.....
Bastard and Burgess.....	do .....	.....	.....	28,000 00	.....	.....	.....
South Crosby.....	do .....	.....	.....	6,000 00	.....	.....	.....
Village of Newboro'.....	do .....	.....	.....	4,000 00	.....	.....	.....
North Crosby.....	do .....	.....	.....	15,000 00	116,000 00	.....	.....
Various Municipalities.....	Buffalo and Lake Huron.....	.....	.....	966,000 00	966,000 00	.....	.....
Township of Cambridge.....	Canada Atlantic.....	.....	.....	20,000 00	20,000 00	.....	.....
Renfrew.....	Canada Central.....	.....	.....	.....	.....	30,000 00	.....
Horton.....	do .....	.....	.....	.....	.....	7,500 00	.....
Admaston	do .....	.....	.....	.....	.....	5,000 00	.....
County of Elgin.....	Canada Southern.....	.....	.....	200,000 00	.....	.....	.....
Township of Townsend.....	do .....	.....	.....	30,000 00	.....	.....	.....
do Durham.....	do .....	.....	.....	15,000 00	.....	.....	.....
do Anderson.....	do .....	.....	.....	15,000 00	.....	.....	.....
Town of St. Thomas.....	do .....	.....	.....	25,000 00	.....	.....	.....
Township of Malden.....	do .....	.....	.....	15,000 00	.....	.....	.....
Town of Amherstburg.....	do .....	.....	.....	15,000 00	.....	.....	.....
South Norwich.....	do .....	.....	.....	7,500 00	.....	.....	.....
Northumberland and Durham.....	Cobourg, Blairton and Marmora.....	.....	.....	113,500 00	322,500 00	.....	42,500 00
Trenton Village.....	Central Ontario.....	.....	.....	10,000 00	113,500 00	.....	.....
Wellington Village.....	do .....	.....	.....	2,500 00	.....	.....	.....

Town of Picton.....	do	21,000 00				
County of Prince Edward.....	do	60,000 00				
do Oxford.....	do	200,000 00				
do Wellington.....	do	135,000 00				
do Waterloo.....	do	110,000 00				
do Peel.....	do	75,000 00				
do Halkon.....	do	70,000 00				
City of Toronto.....	do	350,000 00				
do St. Thomas.....	do	50,000 00				
Town of Milton.....	do	30,000 00				
do Brampton.....	do	20,000 00				
do Ingersoll.....	do	10,000 00				
do Orangeville.....	do	15,000 00				
Village of Streetsville.....	do	20,000 00				
County of Kent.....		155,000 00				
Town of Chatham.....	do	30,000 00				
do Dresden.....	do	20,500 00				
do Blenheim.....	do	11,000 00				
Village of Wallaceburg.....	do	11,000 00				
Township of Sombra.....	do	14,000 00				
do Samia.....	do	16,000 00				
do Woodhouse.....	do	15,000 00				
Town of Simcoe.....	do	10,000 00				
Township of South Norwich.....	do	10,000 00				
do North do.....	do	40,000 00				
Town of Woodstock.....	do	25,000 00				
Township of East Oxford.....	do	25,000 00				
do Woodstock.....	do	60,000 00				
Town of Woodstock.....	do	120,000 00				
do Stratford.....	do	40,000 00				
County of Perth.....	do	10,000 00				
Township of Mornington.....	do	15,000 00				
do Flna.....	do	10,000 00				
Town of Listowel.....	do	10,000 00				
Township of Wallace.....	do	30,000 00				
Town of Palmerston.....	do	25,000 00				
Township of Minto.....	do	20,000 00				
Town of Harriston.....	do	80,000 00				
Township of Normandy.....	do	65,000 00				
do Bentwick.....	do	20,000 00				
do Brant.....	do	45,000 00				
do Eiderslie.....	do	45,000 00				
do ARIAL.....	do	45,000 00				
do Amabel.....	do	43,000 00				
Carried forward.....		753,000 00				
		2,979,000 00				
		93,500 00				
		1,035,000 00				
		257,500 00				
		42,500 00				

No. 10.—STATEMENT of Aid granted to Railways by Municipalities—Continued.

Municipalities.	Name of Railway.	Loan.	Total.	Bonus.	Total	Subscription to Shares or Bonds.	Total.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
ONTARIO—Continued.							
	Brought forward.....			753,000 00	2,979,000 00		42,500 00
Township of Kippel.....				32,000 00			
do Albermarle.....				10,000 00			
Town of Mount Forest.....				22,000 00			
Township of Egremont.....				60,000 00			
do Gleneleg.....				20,000 00			
Town of Durham.....				32,000 00	929,000 00		
City of Belleville.....	Grand Junction.....			150,000 00			
Village of Stirling.....	do.....			5,000 00			
Township of Rawdon.....	do.....			15,000 00			
do Seymour.....	do.....			35,000 00			
do Percy.....	do.....					50,000 00	
do Asphodel.....	do.....			8,000 00			
City of Guelph.....	Guelph Junction.....	155,000 00	155,000 00		213,000 00		50,000 00
County of Frotenac.....	Kingston and Pembroke.....			170,000 00			
City of Kingston.....	do do.....			318,000 00			
Village of Renfrew.....	do do.....			3,000 00			
City of Hamilton.....	Hamilton and North-Western.....			99,733 00			
County of Halton.....	do do.....			75,791 00			
Village of Georgetown.....	do do.....			11,289 00			
County of Peel.....	do do.....			30,974 00			
do Simcoe.....	do do.....			354,007 00			
Town of Collingwood.....	do do.....			12,084 00			
Township of Innisfil.....	do do.....			22,592 00			
do Woodhouse.....	do do.....			20,740 00			
do Adjala.....	do do.....			2,500 00			
do Essa.....	do do.....			2,500 00			
do Toronto.....	do do.....			10,000 00			
do Mulmur.....	do do.....			5,000 00			
Village of Alliston.....	do do.....			8,000 00			
						20,000 00	20,000 00

No. 10.—STATEMENT of Aid granted to Railways by Municipalities—Continued.

Municipalities.	Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscrip- tions to Shares or Bonds.	Total.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
ONTARIO—Continued.							
Townships of Collingwood, Eu- phrasia and St. Vincent.....	Brought forward.....		155,000 00	142,500 00	5,959,466 85		212,500 00
City of St. Catharines.....	do			99,480 00	241,980 00		390,000 00
Town of Thorold.....	St. Catharines & Niagara Central do	80,000 00	80,000 00	80,000 00			
City of Ottawa.....	St. Lawrence and Ottawa.....	200,000 00		20,000 00	100,000 00	60,000 00	
Town of Prescott.....	do	100,000 00				30,000 00	90,000 00
do Gananogue.....	Thousand Islands.....		300,000 00	150,000 00	10,000 00		
City of Toronto.....	Toronto and Nipissing.....			10,000 00			
Township of Scarborough.....	do			30,000 00			
do Markham.....	do			50,000 00			
do Uxbridge.....	do			10,000 00			
do Scott.....	do			50,000 00			
do Brock.....	do			50,000 00			
do Eldon.....	do			44,000 00			
do Bextley.....	do			15,000 00			
do Somerville.....	do			15,000 00			
Townships of Luxton, Digby and Langford.....	do			12,500 00			
Town of Uxbridge.....	do			2,000 00			
Albion.....	Toronto, Grey and Bruce.....			40,000 00	388,500 00		
Caledon.....	do			45,000 00			
Mono.....	do			45,000 00			
Amaranth.....	do			30,000 00			
Arthur.....	do			35,000 00			
Orangeville.....	do			15,000 00			
Mount Forest.....	do			20,000 00			
Toronto.....	do			350,000 00			
County of Grey (Group).....	do			300,000 00			
Owen Sound.....	do			6,000 00			

No. 10.—STATEMENT of Aid granted to Railways by Municipalities—Continued.

Municipalities.	Name of Railway.	Loan.	Total.	Bonus.	Total.	Subscription to Shares or Bonds.	Total.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
QUEBEC—Concluded.							
County of Compton.....	Brought forward.....						
St. Pie.....	International.....			20,000 00		225,000 00	225,000 00
L'Ange Gardien.....	Lake Champlain & St. Lawrence.			10,000 00			
St. Paul.....	do do			6,000 00			
Phillipsburg.....	do do			15,000 00			
Ascot.....	Massawippi Valley.....				51,000 00		51,000 00
Hatley.....	do						
Township of Melbourne & Bromp- ton Gore.....	Missisquoi & Black River Valley..					25,000 00	25,000 00
Township of Ely.....	do do					20,000 00	20,000 00
do North Studley.....	do do					20,000 00	20,000 00
do Bolton.....	do do						
Chambly Canton.....	Montreal & Champlain Junction.....				20,174 00		20,174 00
do Basin.....	Montreal, Portland and Boston...			15,000 00			15,000 00
Town of Sorel.....	do			10,000 00			10,000 00
Village of Boucherville.....	Montreal and Sorel.....			12,000 00			12,000 00
do Varennes.....	do			600 00			600 00
Parish of St. Roch.....	do			1,000 00			1,000 00
County of Pontiac.....	do			500 00			500 00
Village of Shawville.....	Pontiac and Pacific Junction.....			100,000 00			100,000 00
Parish of Sherbrooke.....	do			1,000 00			1,000 00
do Dudswell.....	Quebec Central.....			50,000 00			50,000 00
do Weedon.....	do			25,000 00			25,000 00
Garthby.....	do			5,000 00			5,000 00
City of Quebec.....	Quebec and Lake St. John.....				103,000 00		103,000 00
						450,000 00	450,000 00

No. 10.—STATEMENT of Aid granted to Railways—Constructed and under Construction—by Governments and Municipalities, 30th June, 1888—Concluded.

SUMMARY.

	Loan.		Total.		Bonus.		Total.		Subscriptions to Shares or Bonds.		Total.		Grand Totals.		
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	
<i>Governments.</i>															
Dominion	15,891,533	33			120,708,388	01							136,599,921	34	
Ontario	26,000	00			5,821,007	52							5,847,007	52	
Quebec	3,722,956	00			7,251,704	02							10,974,660	02	
New Brunswick					4,012,665	00			300,000	00			4,312,665	00	
Nova Scotia	50,000	00			1,916,394	94							1,966,394	94	
Manitoba	1,689,000	00			256,000	00							1,945,000	00	
British Columbia					37,500	00							37,500	00	
			21,379,489	33				140,103,669	49			300,000	00	161,783,148	82
<i>Municipalities.</i>															
Ontario	535,000	00			8,778,041	78			692,500	00			10,005,541	78	
Quebec	2,434,000	00			390,274	00			1,368,000	00			4,192,274	00	
New Brunswick	23,000	00			233,500	00			60,000	00			316,500	00	
Nova Scotia					150,000	00			100,000	00			250,000	00	
Manitoba					593,600	00							593,600	00	
British Columbia					37,500	00							37,500	00	
North-West Territories					35,000	00							35,000	00	
			2,992,000	00				10,219,915	78			2,220,500	00	15,432,415	78
			24,371,489	33				150,323,575	27			2,520,500	00	177,215,564	60