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THIRD SESSION OF THE SIXTH PARLIAMENT

OF THE

DOMINION OF CANADA.

SESSION 1889.



Printed by Brown Chamberlin, Printer to the Queen's Most Excellent Majesty.

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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, 1899; 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.

8. Report of the Auditor General on Appropriation Accounts, for the year ended 30th June, 1888.
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- 4a. Canal Statistics for Season of Navigation, 1887, being Supplement No. 1 to the Inland Revenue Report, for the year ended 30th June, 1888—

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- 45. 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.

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Report of the Minister of Agriculture for the Dominion of Canada, for the calendar year 1888.
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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.

- 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.
- 5c. Abstracts of the Returns of Mortuary Statistics for the year 1888-

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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—

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- 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.
- 8. Annual Report of the Department of Fisheries, for the year 1888. Presented to the House of Commons, 11th April, 1839, 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.

- 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.

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Report of the Superintendent of Insurance, for the year ended 31st December, 1888—

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- 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—
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- 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—

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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—

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- 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.

- 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.

- 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.

- 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—
- 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.

- 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.
- 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.

- 2226 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.

- 23a. Return to an Order of the House of Commons, dated 8th February, 1889, for a copy of engineer's last report on the teasibility of constructing a harbor at Naufrage, King's County, Prince Edward Island. Presented to the House of Commons, 14th March, 1889.—Mr. McIntyre—

- 25a. Return to an Address of the House of Commons, to His Excellency the Governor General, dated 30th April, 1888, for copies of all corespondence, 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,
- 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, 1883. Presented to the House of Commons,
- 28. Statement of Expenditure under authority of 51 Victoria, cap. 1, on account of Miscellaneous Unforeseen Expenses, from 1st July, 1838, to 31st January, 1880. Presented to the House of
- 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
- 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 LangevinNot 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
- 83. Return to an Order of the House of Commons, dated 6th February, 1839, 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
- 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
- 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 thereou. 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,

- 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 Payers only.
- 27s. 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. Mc Mullen 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.
- 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—

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- 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

- 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.

- 47c. Return (in part) to an Address of the House of Commons, to His Excellency the Governor General, dated 25th February, 1839, 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.
- 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.

- 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. Mc.Mullen—

 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 employee, 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 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. McCallumPrinted (in part) for Sessional Papers only.

- **Ass. 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 Caval 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 Hooples 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—
- 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

Printed for both Distribution and Sessiona! Papers.

- 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 .-
- 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 Métis, 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 (Ua ifax)-

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.
- 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
- 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. Cotter-
- 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-

- 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 Youge and front of Escott," might be disallowed. Presented to the House of Commons, 19th March, 1889 .- Mr. Taylor-Not printed.
- 36. 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,
- 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
- 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,
- 586. 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,
- 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.
- 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

- 65. Return to an Address of the House of Commons, to His Excellency the Governor General, dated 7th February, 1889, for copies of the Resclutions 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. Eigar......Not printed.
- 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 parristers, 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.

- 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. Guévremont—

Printed for both Distribution and Sessional Papers.

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—

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.

RETURN

(43)

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 risk.

By order.

OTTAWA, 16th May, 1888.

J. A. CHAPLEAU, Secretary of State.

RETURN giving particulars regarding Fire Companies doing business in Canada under a Dominion License, ordered by the House of Commons, Monday, 16th April, 1888. The figures given for the Canadian Companies include their whole business, Fire and Marine, as well outside as within the Dominion, no separation of their expenses being made by the Companies in their annual returns to the Department. For the British and American Companies the figures given are for the business in the Dominion only.

1881.

Companies.	Net Amount at Risk at 31st Dec., 1881.	No. of Policies in force.	Paid for Losses.	General Expen- ses.	Losses per cent. of Premium Income.	Expenses per cent. of Premium Income.	Expenses per \$1,000 at Risk at 31st Dec., 1881.
Canadian.	\$		\$	\$			
British America	38,477,749 6,583,433	No return. do 8,432 No return. 39,899 No return. do 24,115 No return.	152,074 89,058 54,582 94,632 392,442 247,331 107,042	260,032 54,757 37,007 37,530 28,938 13,713 69,917 41,446 349,004	75.63 78.84 88.29 158.80 77.45 796.24 98.32 86.69 76.68	26 90 28·39 36·69 32·96 23·68 27·82 27·79 33·57 27·44	2·93 4·24 2·84
British.	1]	}			
Commercial Union Fire Insurance Association Guardian Imperial Lancashire Liverpool and London and Globe 43—1	6,511,973 8,417,901 17,327,203	No return. do 3,556 8,964 14,851	203,594 7,453 58,965 130,320 141,313	64,418 21,333 15,055 35,737 44,660 39,857	73·27 10·72 90·83 76·44 71·38	23·18 30·70 23·19 20·96 22·56 25·30	2·26 3·28 1·79 2·66 2·07

RETURN giving particulars regarding Fire Companies, &c.—Continued. 1881.

		188	· · · · · · · · · · · · · · · · · · ·				
Companies.	Net Amount at Risk at 31st Dec., 1881.	No. of Policies in force.	Paid for Losses.	General Expen-	Losses per cent. of Premium Income.	Expenses per cent. of Pre- mium Income.	Rypenses per \$1,000 at Risk at 31st Dec., 1882.
British.	\$		\$	\$;	l F
London & Lancashire Fire London Assurance North British Northern Norwich Union Phænix of London Queen Royal	2,547,849 7,547,505 31,5-8,752 10,572,310 5,330,188 18,902,223 19,326,060 67,639,225 6,901,974	1,891 3,095 15,514 6,946 No return. 10,168 11,013 38,248 4,711	9,379 24,283 253,794 65,338 14,205 121,359 150,759 324,667 21,821	8,369 14,683 63,239 20,076 14,538 42,932 43,019 108,725 12,252	30 · 29 38 · 91 93 · 52 68 · 40 26 · 85 67 · 99 77 · 65 64 · 52 41 · 90	27.03 23.53 23.30 21.02 27.48 24.05 22.16 21.61 23.53	3·28 1·95 2·00 1·90 2·73 2·27 2·23 1·61
American.							
ÆtnaAgricultural of Watertown HartfordPhenix of Brooklyn	7,450,625 12,164,991 9,633,132 1,868,706	No return. do 6,119 No return.	60,018 29,316 71,227 34,572	14,924 20,320 11,968 11,995	55.59 51.11 81.29 62.70	13.82 35.42 13.66 21.76	2·00 1·67 1·24 6·42
		188	32.				
Canadian.	1882.						*
British America Canada Fire and Marine Citizens' London Mutual Fire Quebec Royal Canadian Sovereign Western	6, 36,690 20,779,135	No return. do do 39,719 No return. do 29,544 No return.	629,232 73,838 119,681 60,758 42,338 235,595 81,454 1,037,092	245,909 61,026 71,520 26,798 11,895 70,059 48,075 376,710	78·51 223·86 61·64 57·92 84·90 77·89 68·62 75·55	30.68 185.01 36.86 25.55 23.85 23.16 40.50 27.44	3.48 0.70 1.85 3.37 1.77 4.05
British.							ľ
City of London	31.656,368 11,090,799 9,452,518 18,848,052 22,320,434	3,672 14,962 No return. 4,009 9,600 14,610	66,220 238,110 75,568 45,027 100,755 121,876	36,958 60,673 29.071 15,550 36,459 45,473	52·10 77 32 68·09 63·33 56·12 58·44	29.08 19.70 26.19 21.87 20.31 21.81	5 18 1·92 2·62 1·65 1·93 2·04
Liverpool and London and Globe	26,511,023 8,200,171 8,156,137 34,364,165 13,540,882 8,523,538 20,916,440 20,523,020 85,870,326 8,727,139	11.442 10,755 3,225 17,010 8,748 No return 12,766 12,461 48,016 6,003 2,096	107,074 30,537 35,707 179,488 89,217 40,436 123,946 150,717 315,855 39,593 8,318	36,679 26,911 14,713 60,708 27,066 18,218 46,870 44,886 132,677 17,012 8,587	66·11 29·03 53·63 65·62 67·45 55·34 60·72 72·77 55·46 54·75 22·11	22.65 25.58 22.10 22.20 20.46 24.93 21.67 23.30 23.53 22.82	1-38 5-28 1-86 1-77 2-00 2-11 2-2 2-11 1-56 1-98 2-33
American.						<u> </u>	
Agricultural of Watertown Hartford Phonix of Brooklyn	14,208,104	No return. co 8,431 No return	20,271 56,554	17,579 16,856 18,210 8,422	72·10 39·07 54·72 56·02	15·23 32·49 17·62 29·17	1.19

RETURN giving particulars regarding Fire Companies, &c .- Continued.

1883.								
Сощрацієє.	Net Amount at Risk at 31st Dec., 1883.	No. of Policies in force.	Paid for Losses.	General Ex- penses.	Losses per cent. of Premium Income.	Expenses per cent, of Pre- mium Income.	Expenses per \$1,000 at Risk at 31st Dec., 1883.	
Canadian.	\$		\$	\$	l			
	Ψ	į	40	Ψ (
British America Citizens'	58,289,046 18,691,007	No return.	550,044 135,613	262,100 71,637	74·34 74·76	35 ·42 39·49	4·50 3·83	
LOBGOD Mutual Vira	38,467,658	40,009	70,211	29,095	63.35	26.25	0.76	
Quebec	6,645,906	No return.	49,056	13,648	75 · 19	20.92	2.05	
Royal Canadian	21,429,502	do	237,566	81,202	75.58	25.83	3·79 2·67	
Sovereign Western	25,896,039	do	165,857	69,056	81.35	33.87	3.90	
** COVCI II	100,466,083	do	1,068,071	392,175	77.78	28.56	3 30	
British.				İ		'		
Caledonian	6,526,593	4,088	18,631	16,139	26 .22	22.72	2.47	
Orey of Pondon	0 051 205	6,191	82,158	37,792	54.89	25.25	3.80	
Output Coal Union	20,000,700	16,473	254,744	58,394	86.50	19.83	1.77	
Fire insurance Association	13,522,809	No return.		34,080	88.55	31.17	2.52	
Guardian	11,288,207	5,011	38,740	22,020	39.62	22 52	1.95	
TEMPERISI	19,805,465	10,133	92,334	43,079	46.38	21 64	2.18	
Lancashire	21,262,792	14,466	124,943	50,089	59.45	23.83	2.36	
Liverpool and London and		1		10.555	50.10	03.70	1.49	
Chobe	28,585,655	14,608	109,726	42,577	56 ·10 80 ·46	21.76	2.46	
Loadon & Lancashire Fire London Assurance	9,423,865	10,268	76,682 51,289	23,163 16,725	66 64		1.98	
National of Ireland	8,468,218 2,655,093	No return		15,066	19.89		5.67	
North British	37,190,452	19,043	168,409		57.36		2.11	
Northern	15,720,719	9,709	87,365	35,493	51.52			
Norwich Union	9,511,586	No return						
Price nix of London	.1 20.395.321	13,441				23.29	2.32	
Queen	. 1 20 759 787		132,189		61.11	22.30		
Koyal	103 704 993		418,241					
OCOUGE Imperial	2 000 525							
Scottish Union	5,839,288	2,876	13,599	13,858	26.98	27.50	2.37	
American.								
Ætna	7 004 50		1	01.000		3 18.40	2.90	
Agricultural of Western	7,364,720							
			28,965 71,41					
Phenix of Brooklyn	3,467,86					"		
	21.001,00	. In the		1 22,000	1	1	<u> </u>	

RETURN giving particulars regarding Fire Companies, &c.—Continued. 1884.

			J				
Companies.	Net Amount at Risk at 31st Dec., 1884.	No. of Policies in force.	Paid for Losses.	General Expen- ses.	Losses per cent. of Premium Income.	Expenses per cent. of Premium Income.	Expenses per \$1,000 at Risk at 31st Dec., 1884.
Canadian.	\$		\$	\$			
British America	64,868,262 26,668,094 40,488,508 7,096,595 23,070,049 103,591,316	No return. do 41,011 No return. do do	559,736 148,531 75,748	243,029 76,004 37,599 16,915 92,515 404,975	73.44 65.07 64.06 52.72 58.15 78.56	31.88 33.30 31.80 25.06 23.71 28.43	3·75 2·85 0·93 2·38 4·01 3·91
British.				,		20 10	
Caledonian	8,211,249 15,473,888 28,060,143 17 762,005 13,268,033 12,408,610 20,181,050 22,123,978 29,487,959 10,647,447 7,677,227	5,582 10,170 17,865 No return. do 5,397 10,286 14,524 16,571 8,236 3,486	67,032 94,585 237,611 88,231 109,609 68 562 128,330 151,256 122,211 57,974 40,626	22,004 41,502 67,306 37,854 82,759 33,858 47,745 54,503 44,807 23,509 15,694	73 · 70 53 · 28 75 · 74 65 · 79 40 · 57 47 · 77 62 · 56 66 · 79 57 · 34 62 · 26 64 · 06	24·19 23·38 21·45 28·23 27·92 23·59 23·27 24·07 21·02 25·25 24·75	2.68 2.68 2.10 2.13 6.24 2.73 2.37 2.46 1.52 2.21 2.04
National of Ireland	4,146,563 39,704,241 18,167,952 9,065,638 24,544,403 21,945,507 104,490,355 6,074,950	No return. 21,246 9,843 No return. 13,604 12,452 61,962 3,304	24,700 190,535 166,240 48,063 176,594 140,051 360,084 18,294	18,345 74,687 39,827 22,995 52,440 50,702 127,363 11,356	53·73 58·96 85·80 51·99 78·31 61·72 67·77 35·85	39·91 23·11 20·56 24·87 23·25 22·34 23·97 22·25	4·42 1·88 2·19 2·54 2·14 2·31 1·22 1·87
American.							
ÆtnaAgricultural of Watertown HartfordPhenix of Brooklyn	7,450,320 20,139,379 12,045,719 4,462,228	No return. do 12,736 No return.	55,485 33,740 85,534 49,395	21,732 28,876 22,413 17,910	47.04 45.08 63.19 66.69	18·43 33·24 16·56 24·18	2·92 1·43 1·86 4·01

RETURN giving particulars regarding Fire Companies, &c.—Continued.

1885.

		188	5.				
Companies.	Net amount at Risk at 31st Dec., 1885.	No. of Policies in force.	Paid for Losses.	General Expen- ses.	Losses per cent. of Premium In- come.	xpense cent. of mium In	#x penses per \$1,000 at Risk at 31st Dec., 1885.
Canadian.	\$		\$	\$		ļ	
British America Citizens' London Mutual Fire Quebec Royal Canadian Western	71,805,043 22,379,289 43,004,988 7,838,432 23,109,657 103,793,156	No return. do 42,980 No return. do do	541,793 157,978 78,556 39,360 286,741 880,828	260,414 82,618 40,020 18,538 108,210 408,079	63·79 59·37 63·19 50·31 66 58 65·70	30.66 31.05 32.19 23.69 25.13 30.44	3.63 3.69 0.93 2.37 4.68 3.93
British.	*] !	
Caledonian City of London Commercial Union Fire Insurance Association Glasgow and London Guardian Imperial Lancashire Liverpool and London and Globe London & Lancashire Fire London & Lancashire Fire London Assurance. National of Ireland. North British. Northern Norwich Union Phemix of London Queen Royal. Scottish Union	32,994,197 10,593,812 7,980,032 5,374,606 41,178,675 17,996,138 9,143,660 24,715,136	6,638 12,194 18,384 No return. do 6,051 10,244 14,421 18,816 9,500 3,663 No return. 22,173 10,103 No return. 12,920 12,569 63,334 3,980	48,046 86,607 204,526 88,437 104,043 79,163 80,292 115,642 110,677 64,993 46,119 38,094 155,895 105,279 48,695 91,904 129,232 295,008 20,222	19,513 41,545 68,391 33,525 45,016 36,468 45,258 46,977 53,945 22,086 16,251 16,529 78,150 37,133 23,282 51,693 47,764 124,204 11,865	54·42 50·84 61·24 69·91 64·37 52·67 43·22 55·48 53·35 72·24 75·69 70·44 50·55 58·03 53·99 44·18 58·04 59·15 33·42	25·82 24·85 21·45 24·90	2·11 2·47 2·45 2·79 3·02 2·87 2·37 2·08 1·63 2·08 2·04 3·08 1·90 2·66 2·55 2·09 2·15 1·17 1·66
American.							
Ætna		do 10,361	38,663 68,868	25,900 22,126	52.50	36.79	1 ·15 1 ·86

RETURN giving particulars regarding Fire Companies, &c.—Continued. 1886.

Companies.	Net Amount at Risk at 31st Dec., 1886.	No. of Policies in force.	Paid for Losses.	General Expen-	Losses per cent. of Premium In- come.	Expenses per cent. of Pre- mium Income.	Expenses per \$1,000 at risk at 31st Dec., 1886.
Canadian.	\$		\$	\$:	
British America	74,985,428 21,557,864 42,612,366 8,438,555 20,684,187 100,497,986	No return. do 41,219 No return. do do	607, 192 190, 680 83, 880 59, 406 315, 435 881, 899	262,532 79,675 40,211 21,599 94,362 428,521	69·59 76·49 75·42 58·21 78·88 64·27	30·09 31·72 36·18 24·94 23·60 31·25	8.50 3.67 0.94 2.56 4.56 4.26
British.							
Caledonian	10,352,742 13,593,013 27,502,164 14,369,911 20,375,413 11,277,453 19,403,420 21,428,911 33,092,968 10,331,670 8,872,792 6,625,774 40,929,470 15,886,551 10,753,270 23,391,992 21,594,278 73,999,098 9,483,752	7.889 10,445 19,167 No return. do 5,868 10,726 14,425 20,841 7,004 4,133 No return. 22,937 7,917 12,987 7,917 12,984 46,672 5,501	72,624 127,550 236,448 93,807 144,330 99,846 129,743 149,066 195,532 43,218 47,855 76,134 186,642 130,787 46,074 150,407 128,645 267,443 21,282	20,379 43,300 73,492 39,862 39,862 69,593 36,415 51,094 48,232 56,480 22,636 17,435 19,539 79,667 30,976 22,610 46,884 46,887 130,618 16,508	78·49 74·89 72·06 63·75 70·32 66·37 71·23 76·54 87·27 46·58 61·43 89·38 51·95 .77·16 61·13 52·58 26·89	22·02 25·42 22·40 27·09 33·91 24·21 28·05 24·76 26·21 24·33 26·43 27·35 26·49 24·05 22·26 22·68	1.97 3.19 2.67 2.77 3.42 3.28 2.63 2.25 1.71 2.19 1.96 2.95 1.95 2.60 2.17 1.77
American.							
Ætna Agricultural of Watertown Connecticut Hartford Phenix of Brooklyn	6,690,780 23,290,110 1,850,000 11,592,038 7,588,609	No return. do 900 8,631 No return.	68,599 49,976 7,704 69,043 43,989	19,784 29,608 4,001 22,106 21,989	65·58 63·75 38·03 55·41 45·38	16.87 37.77 17.16 17.74 22.68	2·95 1·28 2·16 1·91 2·90

RETURN giving particulars regarding Fire Companies, &c.—Continued. 1887.

		100	36 ·				
Companies.	Net Amount at Risk, at 31st Dec., 1887.	No. of Policies in force.	Paid for Losses.	General Expenses.	Losses per cent. of Premium Income.	Expenses per cent. of Premium Income.	Expenses per \$1,000 at Risk at 31st Dec., 1887.
Canadian.	\$		\$	\$			
British America Citizens' London Mutual Fire Quebec Royal Canadian Western	78,657,839 22,940,313 43,225,614 8,979,007 24,726,087 107,104,971	No return. do 41,811 No return. do do	631,262 217,412 102,639 61,254 338,557 1,031,507	265,196 94,782 40,899 25,098 114,079 497,336	73·03 83·91 86·53 71·13 77·84 65·33	30.68 36.58 34.48 29.14 26.23 31.50	3·37 4·13 0·95 2·80 4·61 4·64
British. Atlas	2,480,080	No return.	19,824	12,476	60.13	37.84	5 ·03
Commercial Union	11,481,770 14,594,317 29,489,109	8,841 11,477 19,420 1,371	71,996 117,840 206,844 11,838	28,047 49,979 68,049 13,454	68·22 73·55 72·56 26·19	26.57 31.20 23.87 29.77	2·44 3·42 2·31 4·83
Glasgow and London Guardian Imperial Lancashi	23,318,649 12,892,090 20,703,993	No return. do 7,765 11,750	117,097 186,763 121,111 95,584	40,448 77,055 40,677 57,360	91·90 71·93 74·50 48·85	31·74 29·68 25·02 29·32	2·74 3·30 3·16 2·77
Globe London & Lancashire Fire	35,727,548 11,059,910	15,528 21,703 7,802	93,548 159,400 65,226 52,333	51,659 63,189 28,494 24,375	48.55 68 41 63.42 72.37	26.81 27.12 27.71 33.71	2·36 1·77 2·58 2·49
North British. Northern	42,141,412 17,922,866	4,747 No return. 23,818 11,266 8,791	53,554 190,752 102,018 62,316	24,260 80,623 42,057 26,101	72·53 62·71 66·61 71·90	32 · 85 26 · 50 27 · 46 30 · 12	3·50 1·91 2·35 2·28
Phonix of London. Queen. Royal Scottish Union.	24,382,573 21,728,319 76,708,116 12,365,771	13,595 13,328 No return. 7,641	112,280 119,306	55,777 51,887 127,646 22,554	51.06 55.91 58.79 38.56	25·37 24·31 24·49 22·40	2 29 2·39 1·66 1·82
American.	, ,						
Ætna	4,250,500	No return. do do 7,901 No return.	54,946 23,546 65,544	25,038 30,814 9,488 27,639 23,551	54.84 69.05 68.56 51.46 149.11	20.07 38.73 27.63 21.70 31.16	2·85 1·32 2·23 2·35 2·90

RETURN

(49)

To an Order of the House of Commons, dated the 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.

By Order.

HECTOR L. LANGEVIN,

Acting for the Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE, OTTAWA, 8th March, 1889.

(Telegram from Cornwall.)

12th October, 1888.

To A. P. BRADLEY.

Serious break took place in canal at 11.30 last evening on Six-mile Reach. Over 200 feet of embankment swept in river. Navigation likely to suspend for two weeks. Have telegraphed Mr. Page to Ottawa.

D. A. McDONELL.

12th October, 1888.

E. H. PARENT,

Montreal.

Break Cornwall Canal. Mr. Page attending. It may be of advantage you should visit the locality. Please do so.

A. P. BRADLEY.

12th October, 1888.

John Page, Esq., Brockville.

Superintendent Cornwall Canal wires: "Serious break took place in canal at 11:30 last evening on Six-mile Reach. Over two hundred feet of embankment swept in river—navigation likely to suspend for two weeks.

A. P. BRADLEY. 12th October, 1888.

JOHN PAGE,

Brockville, or forward.

Minister says if necessary bring up Conway and staff to aid in repairing the Cornwall Canal break.

A. P. BRADLEY.

12th October, 1888.

D. A. McDonell,

Cornwall.

You say the break is two hundred feet in length. Please say to what depth.

A. P. BRADLEY.

(Telegram from Montreal.)

To Hon. J. H. Pope,

Railways and Canals Department.

12th October, 1888.

I have wired Mr. Page to send Conway and his Staff to the break in Cornwall Canal. Please to have it carried out as it is most important. Shipping will be seriously delayed.

W. W. OGILVIE.

(Telegram from Brockville.)

12th October, 1888.

To A. P. BRADLEY,

Railways and Canals.

I leave by first train for Cornwall Canal casualty; if I have to remain for more than one day there Sault Ste. Marie letting must be further postponed. Ask Minister which course he prefers me to adopt. Answer at Mille Roches.

JOHN PAGE.

(Telegram from Montreal.)

12th October, 1888.

To Hon. J. H. Pope.

Cornwall Canal break calamity to trade. This company has timber in Kingston, and barges can be secured to transport, if required for repairs.

HUGH McLENNAN.

(Telegram from Cornwall, Ont.)

13th October, 1888.

To A. P. BRADLEY,

Railways and Canals.

The break in canal 200 long by 23 feet in depth. Mr. Page and Conway were here last night.

D. A. McDONELL, Superintendent.

(Telegram from Brockville, Ont.)

13th October, 1888.

To A. P. BRADLEY.

Returned from Cornwall this morning; breaks will take considerable time to make good; have put on Gaherty to make necessary crib-work, and directed Conway to proceed with earth work; both of them making arrangements to start at once. It will take time to get matters into working shape.

I doubt being able to do justice to Sault Ste. Marie intricate works; in face of so

very many interruptions all but discouraged.

JOHN PAGE.

12th October, 1888.

JOHN PAGE.

At Mille Roches, or forward.

Minister thinks you should send for Conway's full staff, and see that the break has such help as required; he does not want to further postpone the Sault work.

A. P. BRADLEY.

THE KINGSTON AND MONTREAL FORWARDING COMPANY (LIMITED).

Montreal, 12th October, 1888.

To the Hon. J. H. Pope,

Minister of Railways and Canals, Ottawa.

SIR,—Owing to this unfortunate washout in the Cornwall Canal, we have to-day nine barges and two tug steamers held over at Prescott. A number of the barges are loaded with grain for our ocean steamers here. We have also at Kingston, and due there by Sunday, 100,000 bushels grain, shipped from Chicago for export to Liverpool. If the Superintendent of the Cornwall Canal is correct in his statement that it will take all month to repair the break, our fall trade is ended, as all grain will be diverted by Buffalo.

I would respectfully urge that the Department despatch their best engineer to the scene, with instructions to obtain the most competent assistants, and spare no expense, and working night and day. Would also advise the publication, as soon as

possible, when navigation can be resumed.

I am, Sir, your most obedient servant,

W. G. STEWART, Managing Director.

16th October, 1888.

Sir, I am instructed to acknowledge the receipt of your letter of the 12th instant, urging that every exertion be made to repair the break in the Cornwall Canal as soon as possible, and asking that your company be notified of its re-opening

I am, Sir, your obedient servant,

A. P. BRADLEY, Secretary.

WM. STEWART Esq., Managing Director, Kingston and Montreal Forwarding Co., P. O. Box 920, Montreal.

OTTAWA, 17th October, 1888.

Sir, On Friday last I visited the "break" in the Cornwall Canal bank, near Mille Roches, and found, as near as I could estimate, that about 200 feet in length of the bank, on the side next the canal, had disappeared; besides the southern half of the bank, for a considerable distance, had moved out and settled down, and that even the bottom, for half way across the canal, had been washed out from 6 to 7 feet; whilst at two places in the canal small banks stood up like pillars, the material was so hard.

At the outer or river side of the bank the bottom was, as near as I could judge (there being no means of getting to it), from 12 to 15 feet deep, I at once decided that there were only two ways of getting the gap quickly made up, one of which was to put in a line of crib-work on the lower or river side, so as to retain the earth put in to make up the bank. This would, of course, require time; the other course was to try, if possible, to cut off the leakage at the guard gates and weir at Dickenson's Landing, and to endeavor to get the drainage water past the "break," and, if successful, no crib-work would be required, as a sufficient body of stone could be put in at the outer side of the bank to prevent the escape of the earth put in to make up the gap. The latter course has been adopted, and, I am glad to learn, is likely to be successful, as it will enable the work to be proceeded with more rapidly. There are now 136 men employed making roads, bridges, &c., and 36 teams hauling and delivering stone, so that the operations are being proceeded with as expeditiously as can be done, and will, after to-night, be carried on night and day. Electric arc-lights have been provided, and a connection with the men in charge at "break" established.

I beg respectfully to advise that authority be obtained for an expenditure, if need be, of \$10,000, although I think it unlikely that more than \$8,000 will be required.

I have the honor to be, Sir, your obedient servant,

JOHN PAGE, Chief Engineer.

The Secretary of Railways and Canals.

REPORT BY MR. PAGE ON No. 121806.

The within letter was written by me a few days after the breach in the bank of the canal occurred, at a time when there seemed to be a fair prospect that it could be made good, and navigation resumed in ten or twelve days at most; but wet and unpleasant weather set in, and continued night and day for several weeks. It was then difficult to get suitable men and teams to do the necessary work; although there was no deficiency in the number of either, very few of them were accustomed to the kind of work, and did not seem at all desirous of learning, which, together with the very rainy, unfavorable weather, and extremely soft clay soil, made it difficult for men and horses to move around at all. This unfavorable state of matters led to treble the time of doing the work and nearly five times the estimated expense—that is to say instead of \$10,000 it cost upwards of \$47,000.

The breach occurred on the night of the 11th October, and it was the 15th November before the bank could be got into a condition that would admit of sufficient water being let into the canal to enable vessels to pass.

This spring the bank is being widened out to render it still more secure.

The actual cause of the breach is believed to have been the action of the high water in the north branch of the river in January and February, 1888, which softened the banks, that at places adjoining the margin of the river have not the best kind of foundation.

These places are intended to be secured by placing the material excavated from the prism, when deepening and widening the channel, in a position to strengthen and widen out the banks, keeping it in place by a line of crib-work when the water exceeds 5 feet in depth, and when shoaler by a toe of boulder stone, the whole to be afterwards secured by a facing of stone up to high water line, as stated in my report of the 27th February, 1889.

JOHN PAGE.

1st March, 1889.

(Telegram from Moulinette, Ont.)

To J. PAGE.

At the present rate of progress, if weather keeps good, water will be let in on Tuesday next. As there will be but one pay day, send plenty of money to the credit of the paymaster. Don't you think it advisable to give notice through the press to load vessels not over 8 feet, &c., &c. Notify factories not use any water before Monday, the 5th November. Two dollars day for men; two and half for carts, and three and half for teams.

(Telegram from Mille Roches, Ont.)

To John Page.

At present rate of progress and dry weather, breach filled ready for dredge to remove portion of coffer dam Sunday evening next. Think it best to make but one pay for men on, say, Monday or Tuesday next.

M. CONWAY.

The undersigned, referring to the annexed memorandum from the Honorable the Minister of Railways and Canals, recommending that a warrant of His Excellency the Governor General be issued for the sum of \$10,000, for the purpose of providing funds for the repair of a serious break on the Cornwall Canal, has the honor to report to Council that there is no Parliamentary provision for the expenditure above referred to.

Respectfully submitted,

G. E. FOSTER,

Minister of Finance and Receiver-General.

FINANCE DEPARTMENT, Ottawa, 19th October, 1888.

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 23rd October, 1888.

On a memorandum, dated 18th October, 1888, from the Minister of Railways and Canals, representing that, under date the 17th October, instant, the Chief Engineer of Government of a carrier break that has of Government Canals has reported on the subject of a serious break that has occurred in the Cornwall Canal, near Mille Roches, and of the operations undertaken in order to the cornwall Canal, near Mille Roches, and of the operations undertaken in order to its repair.

The Minister further represents that the Chief Engineer advises that authority be obtained for an expenditure of \$10,000 in such repair, an amount which he considers sufficient, and their being, as is advised by the Minister of Finance, no appropriation available for the purpose, and the case being one of urgency, the Minister of Finance of the strength warrant of His Minister of Railways and Canals recommends the issue of a special warrant of His Excellency the Governor General for the amount named, from which the cost of repair may be met.

The committee advise that a special warrant do issue accordingly.

JOHN J. McGEE, Clerk Privy Council.

The Honorable

The Minister of Railways and Canals.

BROCKVILLE, ONT., 29th October, 1888.

To A. P. BRADLEY, Esq.,

Railways and Canals.

On the way to Mille Roches; something gone wrong again; expect to reach Ottawa Tuesday.

JOHN PAGE.

Montreal, 29th October, 1888.

То Ноп. Ј. Н. Роре,

Detention by the break in Cornwall Canal becoming most serious; please to do all you can to forward the work.

W. K. W. OGILVIE.

Brockville, Ont., 13th November, 1888.

To A. P. BRADLEY,

Railways and Canals.

Work at Mille Boches proceeded fairly yesterday; in hopes that water can be safely raised Wednesday night; various important reasons necessitated my being there that day, will then return to Ottawa.

JOHN PAGE.

CORNWALL, 6th December, 1888.

SIR,—I beg to inform you that the Cornwall Canal is now closed for the season. Gates and bridge tied up in winter order. The water on the Six-mile Reach let down to 7 feet, which is sufficient to supply the mills.

I find the embankment of the break has settled about 1 foot. Lowering the water to 7 feet will, no doubt, help to keep it as it is until such time as the Govern-

ment may see fit to back the break with stones and earth.

I am placing the bridge that we used while working at the bank, between the break and land, across the canal, so that when the ice takes in the canal this bridge will make a safe road for teams to cross, if necessary, and will come good in spring, when the ice might not be safe.

I have the honor to be, Sir, your obedient servant,

D. A. McDONELL, Superintendent.

A. P. Bradley, Esq., Secretary,

Railways and Canals, Ottawa.

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 29th December, 1888.

On a memorandum, dated 22nd December, 1888, from the Minister of Railways and Canals, representing that a statement of expenditure in connection with the recent "break" on the Cornwall Canal has been handed in by the Chief Engineer of Government Canals, showing a total of \$47,872.85, of which amount the sum of \$10,000 was covered by a special warrant of Your Excellency, leaving a balance of \$37,872.85 unprovided for.

The Minister recommends, as the necessity is urgent, and the Minister of Finance having reported that there is no Parliamentary appropriation from which the same can be defrayed, that a special warrant of His Excellency the Governor General do issue for the sum of \$38,000, in order to cover this expenditure.

The Committee advise that a special warrant be issued, as recommended.

JOHN J. McGEE, Clerk Privy Council.

The Honorable

The Minister of Railways and Canals.

Brockville, 30th October, 1888.

Dear Sir—In these troublous times I can well understand how the great affairs of State demand your most earnest attention, and for fear of inopportune intrusion, I have hitherto refrained from reminding you of a matter of detail which just now is giving no little trouble and anxiety to those engaged in commerce; but I feel that I must discharge my Canadian conscience of its duty, by reminding you of my views for the enlargement of the Cornwall Canal, as set forth in my letter addressed to you on the 17th February, 1885. My main object in suggesting the plan I did was to provide against disaster of the kind under which the navigation is now stopped by the breach near Mille Roches,

I am informed it is the intention of your Department to enlarge the upper reach of the old canal, in situ, following its sinuosities over the same treacherous ground. If such plan is persisted in I think you may look for more serious breaches and stoppages after the enlargement than have happened before it, for the reasons I have pointed out, and if the volume of trade by the St. Lawrence ever reaches the magnitude expected, every stoppage of the traffic must be felt with tenfold severity.

So far, my little efforts personally to improve on canals have been abortive, and I am not encouraged to offer suggestions of any kind; but when a man feels and knows that I reports. In the knows that he is right he is apt to be persistent in spite of all rebuffs. In the expenditure of public moneys we look for certainty instead of uncertainty of results, even if the work costs more. But my plan will cost less. I would give you a deep water pond 3 miles long and 300 yards wide, in place of a canal hung up on a treacherous bank, never safe from breaches and land slides. I am sure that if the business more and a sure that if the business more and a sure that if the business more and a sure that if the stating in confidence to you business men of Montreal were aware of what I am thus stating in confidence to you they would not settled on a they would give you no rest until your plans were reconsidered and settled on a permanent basis.

With sincere respect, I am yours faithfully,

SAMUEL KEEFER.

Hon. J. H. Pope,

Minister of Railways and Canals, Ottawa.

Brockville, 17th February, 1885.

SIR,—I wish to bring under the notice of your Department a suggestion of mine in reference to the enlargement of the Cornwall Canal, which you will find embodied

in the accompanying memorandum. This is no new idea to me. When I was Assistant Engineer on that Canal, under the late John B. Mills, I brought it to his notice, but he failed to see the importance of it. of it. Since the commencement of the present enlargement the thought of it has been row: been revived, in me at least, perhaps also in others, but it was strong enough to induce the commencement of the present charged the strong enough to induce me to pay a visit to the locality during the last summer to revive my earlier impression and consider the whole question anew in relation to the operations now become and consider the whole question anew in relation to the operations now begun at either end of the canal. I am the more convinced by this visit that it is a suggestion well worthy of the consideration of your Department, and that an examination will worth the consideration of your Department, and that an examination will be a suggestion will be a suggestion with the consideration of your Department, and that an examination will be a suggestion will be a su nation and report on it by one of your Engineers is not only desirable, but that it will, if fairly and intelligently dealt with, lead to its adoption and prove of signal advantage to the public service.

I have the honor to be, Sir, your obedient servant,

SAMUEL KEEFER, M. Inst. C.E.

The Hon. J. H. Pope,

Minister of Railways and Canals, Ottawa.

Memorandum Relating to the Enlargement of the Cornwall Canal.

This canal was surveyed, located and, for the most part, constructed under the direction of John B. Mills, whose plans were submitted to and approved of by Benjamin Wright, at one time Chief Engineer of the Eric Canal. Both were American can engineers. The writer is one at those who assisted in the survey and construction of the canal.

The work was begun in 1834, under commissioners appointed by the Parliament of Upper Canada, and at the Union of the two Provinces in 1840, was completed under the Board of Works.

The canal, which avoids the Long Sault and Cornwall Rapids, is 111 miles long. It has one guard lock and six lift locks of 8 feet lift each, to overcome the fall of 48 feet in the river in that distance. It is 100 feet wide at bottom and 150 feet at surface; the locks, 200 ft. by 55 ft. by 9 ft. in the chamber, affording a draft of 9 feet page 150 fe feet navigation over the sills and 10 feet in the canal between the locks.

The line of the canal follows the sinuosities of the river along its left bank, $5\frac{1}{4}$ miles to Mille Roches, thence to Cornwall $6\frac{1}{4}$ miles by a more direct course inland.

For 2 miles along the bank of the Long Sault Rapids the soil is of strong elay and gravel, with stones and boulders embedded in it, and is admirably adapted for making a strong and permanent embankment between the canal and the swift current of the river—the outer edge of which is well protected by the boulder stones taken out of the excavation for the canal.

. For the remaining 31 miles to Mille Roches the line is laid in side cutting, mostly sand and clay, in alternate layers, requiring great care in the selection and disposal of the material going into the embankment, in order to render it impervious to water. Springs of water were also found in the base of the embankment, which gave much trouble, and which had to be led out by artificial drains; and still, notwithstanding all the care bestowed upon the work, when the canal was opened for use breaches occurred in the bank which carried out many thousands of yards of solid material and stopped the navigation for weeks. In some places the water found its way under the bank through layers of sand some feet under the bottom of the canal. These streaks of sand had to be cut off by deep puddle trenches, which, now in the enlargement by which the canal is to be made 5 feet deeper, will be cut through, and expose the bank to turther danger if it is not guarded against in proper time. This is the chief difficulty to be encountered in the prosecution of the enlargement of the existing canal, and is a matter of serious moment. Any breach in this part of the enlarged canal might involve great cost for repairs, and much delay to the navigation.

Another difficulty in the enlargement presents itself in the road culvert, or subway under the canal at Moulinette. This structure, which narrows the canal to 50 feet at bottom at that place, and the crown of which rises above the bottom of the enlarged canal, will undoubtedly have to be removed, and the public served by means of a draw-bridge, to communicate with the road bridge over the mill-dam leading to

Sheik's Island.

Having thus pointed out the main difficulties in the way of the enlargement of the old canal, it is now proposed to show how they can be avoided and a better plan

adopted.

Sheik's Island belongs to Canada. The channel between it and the main land on the Canadian shore is Canadian water, and is not navigable, but it can be readily utilized and made to serve as a part of the enlarged canal, simply by throwing dams across it, at the head and foot of the island, leaving the old canal untouched, save at the two ends, where the embankment must be cut through to connect with deep water basin formed by those two dams. This basin will be fully three miles long, from 600 to 1,500 feet in width, and from 16 to 30 feet deep, and consequently much easier to navigate than the old winding canal. The channels at either end, where the dams are to be erected, are quite narrow, and the bottom either hard gravelly clay or solid rock, offering every facility for the erection of strong and permanent dams.

Against this plan are the following drawbacks:-

- (1). A small quantity of land will be overflowed on the island side, and at the culvert entrance at Moulinette.
- (2). The mill privilege at Moulinette of some 6 feet head and fall will be obliterated—and (3). The road bridge over the mill-dam to the island will have to be raised—probably re-built.

On the other hand, magnificent water powers will be created, both at the head and foot of the island, of infinitely greater value to the interest, industry and prosperity of the surrounding country than the small mill privilege that will be destroyed by the establishment of this fine deep water basin.

But chiefly the danger and uncertainty of deepening the old canal, in situ, without interruption to the navigation, either during or after the enlargement, will

be entirely avoided.

Of the comparative cost of deepening the old canal for this distance, and that of the plan here proposed, it will not be possible to speak without an actual survey and estimate by a competent engineer. It is suggested that this be done before taking further steps for the enlargement of this canal. Of the superior efficacy, convenience and utility of the proposed plan there can be no doubt.

SAMUEL KEEFER, M. Inst. C. E.

Brockville, 17th February, 1885.

Ottawa, 27th February, 1889.

SIR,-The breach that occurred on the 11th of October last in the south bank of that Part of the Cornwall Canal between Mille Roches and Moulinette, drew forcible attention to the insecurity of certain portions of the made banks on the summit level of that canal.

When the work of enlarging and deepening it was placed under contract, provision was made that the widening might be done on either side that would be most likely to improve the line—that is to say, that although the widening was intended to be done principally on the north side of the present channel, it was thought that some salient or prominent points could, with advantage to the general line, be in part removed.

The material excavated in widening and deepening the prism was, of course, to be placed on the south or river side of those places where the made banks of the

canal are close to the margin of the river.

The casualty above mentioned, and the information subsequently obtained have, however, shown that it would be injudicious to cut into the north or canal side of the south or river bank; consequently, the widening must be done wholly on the north or landward side, and the line of the south bank allowed to remain undisturbed and the slope on the canal side continued down to the new bottom line, at the same

angle as at present.

This conclusion has been arrived at by ascertaining from some of the old contracts how the banks on the St. Lawrence Canals were intended to be formed, and it is unlikely that they would be made much different from the manner therein described, which is as follow:—"All the best earth for making tight banks must be placed in the front or middle part of the same, that of inferior quality in rear. In forming the bank, the earth, if carried by carts, must be laid in courses not exceeding 12 inches, and all the best material must be placed in the front or middle of the bank." The information received from various reliable sources leads to the impression that certain precautionary measures were adopted in preparing the sears for some of the banks; all of them were, however, no doubt formed as above stated.

S. Keefer, Esq., C. E., in a letter addressed to this Department, states that he was assistant engineer on the work during the formation of the Cornwall Canal, and on several occasions, public and otherwise, "claims the privilege of contributing the facts in relation to the formation of the banks, &c.," of the stability of some of which

he entertains grave doubts in case of deepening the present line of canal.

An assistant engineer or resident officer, so long engaged in duties connected with carrying out the works, is doubtless in a good position to enable him to fully describe how important banks upon the line were actually made: hence, positive statements by a gentleman thus possessed of the facts are well worthy of careful considera-

He states that "for two miles along the bank of the Long Sault Rapids the soil is of strong clay and gravel, with stones and boulders imbedded in it, and is admirably adapted for making a strong and permanent embankment between the canal and the swift current of the river—the outer edge of which is well protected by the boulder stones taken out of the excavation for the canal."

The above is fully borne out by the present condition of the bank.

Eastward of the rapids "to Mille Roches, the line is laid in side cutting, mostly sand and clay in alternate layers, requiring great care in the selection and disposal of the material going into the embankment, in order to render it impervious to water. Springs of water were also found in the base of the embankment, which gave much trouble," &c., &c.

To meet the apprehended difficulties on certain parts of the latter stretch of the canal within a distance of 3½ miles, Mr. Keefer suggests the expediency of converting what is called the "Sny," or north branch of the river, into a navigable channel by means of dams—one between the head of Sheik's Island and the south bank of the canal, and another extending from the foot of the island to the canal bank, then cutting a channel-way at both places of a capacity suited to the free passage of vessels.

It is not stated whether it is contemplated to place the dams at the narrowest part of the "Sny," and use the present towing-path, with a bridge over each of the openings for the channel; or of placing the dams obliquely, and in a position that would make them correspond as nearly as possible with the line of those parts of the

island and canal bank with which they connect.

If the upper dam were made at the place where Sheik's Island and the canal bank are nearest to each other it would be about 450 feet long, and part of it 30 feet high; but if made on a line suited to the south bank of the canal and the north-west point of the island it would require to be about 900 feet long, and part of it also 30 feet in height.

If the lower dam were made at the narrowest place of that part of the north channel it would be about 500 feet long, but if made slightly oblique, so as to range better with the line of the canal bank and the island, it would be 800 feet long,

and in either case it would in part be 45 feet high.

The shore along the north side of Sheik's Island has a very tortuous and irregular outline, so that to make anything like a suitable towing-path along it would be attended with a vast deal of uncertainty, besides expense; still, were this not done, in the case of making the "Sny" the navigable channel, a swing bridge would be required for canal purposes over each of the openings made in the bank, instead of one swing bridge for public travel across the canal at Moulinette.

Having already stated how it is proposed to enlarge and deepen the present canal, and the manner in which the material excavated is intended to be disposed of, viz., to strengthen the weakest and least secure parts of the present banks, or those parts of them that are closest to the margin of the river, the aggregate extent of which, there is good reason to believe is less than one-third of the whole distance, or less than three times the length of the two dams that would be required to

connect Sheik's Island with the banks of the canal.

Those who have given careful attention to such matters, and are free to deal with the question on its merits, will scarcely fail to observe that dams of such a height, made otherwise of moderate dimensions, in the ordinary way, of the class of material of which some of the banks are represented to consist, would not be likely to receive a favorable impression of their security. In fact, they might reasonably be lead to the conclusion that the adoption of the proposed means to meet uncertain risks might result in others quite as perplexing, if not even of a still more formidable kind, unless precautions were taken, other than usual, for even banks of the height

required.

The materials described by Mr. Keefer as found in side-hill cuttings when forming the canal, although not very suitable for making banks in the usual way, are, nevertheless, of a nature that when thoroughly mixed by bucket dredging-machines, then carried and placed in the manner described for proceeding with the works of enlargement, will form moderately good banks—that is, the north half of the channel-way is to be made to the required width and depth during the first season's operations, and the material removed is to be placed on the south or river side of the south bank by derricks rigged so that the box or shell containing it is lowered at least 10 feet below the top of the towing-path before it is dumped at the outer edge of the bank slope. At places where the present banks are close to the margin of the river, and the water alongside more than 5 feet in depth, a rough class of narrow cribwork will be placed to keep the dredged material in position until it is consolidated. The whole of the banks are afterwards to be well protected by a facing of stone.

10

The first season's operations will strengthen and widen out the bottom part of the bank before the work of deepening has approached nearer than 45 feet to the inner slope of the south bank. The deepening of the south half of the channel will be appropriately placed where required will be proceeded with the following season, and the material placed where required to further and the following season, and the material placed where required to further widen out and strengthen the banks. The inner or north side of them will not in will not in any way be interfered with, further than continuing the slope down to the bottom at the same angle that it is at present.

It is no doubt true that placing the dredged material on the outer side is not the position where it would be most serviceable to banks of the description these are represented to be; still, the material will have a sectional area and extent, and be of a nature that when fully consolidated it would almost, if not altogether, retain the water in the canal, were the old banks opposite the respective places, where it is

used, removed altogether.

Of the feasibility, efficiency and safety of enlarging the present canal in the manner described in the specification on which the work is let, the slightest doubt is not entertained by me; but as regards forming the "Sny," or north branch of the river, into a navigable channel, by means of dams at both ends of Sheik's Island, it must be acceptable channel, by means of dams at both ends of "the late must be confessed that my perception is quite as obtuse as was that of "the late John R M:" John B. Mill," who, it appears, "failed to see the importance of it."

It is quite true that the volume of water that passes down the "Sny" is very small, compared with the main body of the River St. Lawrence; at the narrowest place immediately below the rapids the sectional area of the water-way at the lowest stage of the river is about 600 square feet, all of which passes through the dam at

Moulinette, and the openings made in it.

When the river is at its high stages the volume that passes down the "Sny" is of course proportionately greater. In January, 1888, during an ice-jam, large quantities of proportionately greater. tities of ice passed down the north branch and destroyed in a great measure the mills and destroyed in a great measure the mills and dam at Moulinette. If there had been a dam at that time at the north-west point of the island it is fully believed that no one can say, with any degree of certainty, what would have been the result, nor indeed what would be the effect, at any time, of closing the north branch of the river.

The St. Lawrence is on too grand a scale to admit of the probable result of interference with it to be even approximated by the use of formulæ fairly applicable

to ordinary streams.

It is a well known fact that the river has been seriously affected by causes either little understood or altogether ignored by those desirous of accomplishing certain

objects—apparently irrespective of ulterior results.

The effect of cutting loose a sheet of ice in a bay, then swinging it across the channel, has been known to lead to the drowning out for a time of a considerable tract of land along the margin of the river, and the closing of a branch of the river at the head of the Beauharnois Canal is well known to have led to a vast deal of trouble and an outlay for land damages of nearly \$400,000.

It is true that the branch of the river above mentioned was much larger than the "Sny" which Mr. Keefer now recommends to be closed; still, the latter is in the same direction as the former. Besides, no matter what the effect might be, a case

would be opened that might lead to complications with a foreign country. As full information has now been obtained relative to how the banks were made and the class of material in them, no doubt need be entertained of their being made secure, without resorting to the formation of a large pond, that could not by any possibility, without resorting to the formation of a large pond, that could not by any possibility. sibility benefit the navigation, especially as it would be nearly two miles from the upper end of the canal and at least six miles from its lowest end, where the water-way in both cases is throughout of the usual sectional area.

It is therefore presumed that the work of enlargement and deepening will be proceeded with and carried out as provided for in the respective contracts entered

into with the Government.

I have the honor to be, Sir, your obedient servant,

RETURN

(49d)

To an Address of the Senate, dated the 26th March, 1888, for 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 1st 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 superintendent, foremen or overseers; also the duties performed by each employee and how 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 plans and specifications and instructions to the Superintendent of the Welland Canal by the Minister of Railways and Canals, or by 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.

By Command.

HECTOR L LANGEVIN,

Acting for the Secretary of State.

OTTAWA, 5th April, 1889.

Note.—The Joint Committee of both Houses of Parliament ordered the printing of the following extracts only: Expenditure from the 1st July, 1869, to the 1st July, 1870, and from the 1st July, 1886, to the 1st January, 1888.

OTTAWA, 17th January, 1889.

Sir,—For the purpose of completing a Return to the Senate, moved for by the Hon. Mr. McCallum, I am directed to request that you will be good enough to furnish the following information:

1. Copies of instructions received from the Department for the erection of the

custom house and post office at Port Colborne.

In this matter the departmental number of letter and date will be sufficient.

2. The same information in regard to the erection of a wharf or dock west of the lock in Port Colborne. Statement of the material used and cost of said wharf or dock. Purposes for which said wharf was built and what it is used for.

Cost in detail of wrecking pump purchased for the Welland Canal. Date of purchase. The number of days said pump has been used for canal purposes in each year

and date of such service.

If used for private purposes the dates and the amount received by Government for such service. Cost in detail of diving armor purchased for the Welland Canal. Number of days used in each year and date of such service.

Also detailed statements 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.

I am to request that the information herein specified may be rendered with as little delay as possible.

I am, sir, your obedient servant,

A. P. BRADLEY, Secretary.

W. Ellis, Esq., Superintendent Welland Canal.

OTTAWA, 18th January, 1889.

Sir,—In further reference to the subject of my communication of yesterday's date, calling for certain information needed to complete a Return to the Senate (Mr. McCallum's), I am directed to request that you will also furnish reply to the following additional points:

1. Copies of all tenders received by the Government for the erection of the custom

house and post office building at Port Colborne.

2. Copies of plans and specifications and a detailed statement of the material

used in, or the cost of erecting the said building in the year 1887.

3. 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 by any officer of that department, for the erection of a wharf or dock west of the lock in Port Colborna

The information sought under this query (No. 3) to be taken in place of that

called for yesterday on the same subject.

Your early reply to this matter is particularly requested.

I am, sir, your obedient servant,

A. P. BRADLEY, Secretary.

W. Ellis, Esq., Superintendent Welland Canal.

SUPERINTENDENT'S OFFICE, WELLAND CANAL, St. Catharines, 26th January, 1889.

Sir,—In answer to your letters, No. 77503 and 77513, I beg to submit the fol-

lowing information:-

1. I cannot furnish copies of instructions from the department for the erection of canal tolls collector's office, custom house, inland revenue and post office buildings at Port Colborne, nor for the wharf or dock at that place, any more than I can for many other essential works that I have built from time to time after consultation with the Chief Engineer and my experience of what was necessary to complete the equipment of this important work in every respect to insure thorough efficiency and quick facilities, and in this case loud complaints had been made for years past by captains and others using the canal of the want of proper accommodation, conveniently situated, after the former substantial canal toll and custom house and inland revenue building had been pulled down, to admit of the canal enlargement, necessitating the removal of the staff into the substituted little unsuitable hired rooms over a store, which were very inconvenient, unsafe from fire risks and bearing a high annual rent, which the Government had to pay.

The plans and specification for the building, after completion, were forwarded to

the chief architect in Ottawa, in whose office they will be found.

The materials used were brick and stone, and all others throughout were of the very best kind; the roof was covered with fire-proof iron shingles, fire-proof safes and vaults furnished, where the canal tolls, custom house, inland revenue and post

office papers are now properly and safely kept.

As soon as the inhabitants heard that a new Government building was about to be built to replace the old one, they memorialized the Post Office Department to have post office accommodation provided under the same roof, and this was done without extra expense by a re-arrangement of the internal partitions, and the public were greatly pleased at having modern and convenient post office accommodation, while captains and crews of vessels now get large numbers of letters addressed there, which they now get quickly, without being detained by having a long distance to 49d—11

go for them as heretoforc, and the Government saves the additional annual rent they have had for so many years previously to pay for unsuitable and inconvenient accommodation in a wooden building, dangerously located for fire risks.

The tenders received for the erection of the building, in answer to public adver-

tisements, well circulated, were as follows:-

T. L. Nichols, Welland	\$ 3,856	75
R & J. Miller, Port Elgin	3,527	00
Dickinson & Suess, Humberstone	3,280	00

The lowest of the above was accepted, and the work thoroughly well built and finished. Copies of the tenders accompany this. I may add the new building is located most conveniently for all the purposes required, and furnishes the last and only required office accommodation to complete the canal service, and for which the various inspectors, viz, H. B. Witten for canal tolls, Mewburn of customs, and Sweetman of post offices, have been loud in their praises and thanks for the improved

and safe accommodation so long and so urgently previously needed.

2. No plans or special instructions were received for the erection of the wharf or dock at Port Colborne, but the urgent want of such equipment or accommodation had been often discussed with the Chief Engineer; and it proves now to be too small, and should be increased. When large vessels come into the harbor in distress it is the only place they can conveniently lighten or tie up for repairs, so as to be cut of the way of others, and when the harbor is crowded, as is sometimes the case before, during and after storms, tugs have to leave their berths on the west side of the harbor to make room for vessels, and tie up to new wharf on east side and coal up there, and thus give the best and safest berthage on the west side to the large class of vessels now using the canal and that run into the harbor in foul weather for shelter.

I enclose herewith statements of the material used and cost of the wharf or

dock, as requested.

3. I have furnished the particulars asked for (on a separate sheet enclosed herewith) of the wrecking pump, except the information about the number of days and dates when we used the same, which we have not kept a record of. It has been used for pumping out lock pits and other works, and has saved the Government thousands of dollars.

4. Exactly the same answer is applicable to the case of the diving armor or

apparatus.

I may add until I purchased the pump and these diving suits, there were no such appliances nearer than Detroit and Kingston.

Your obedient servant,

WILLIAM ELLIS, Superintendent.

A. P. Bradley, Esq., Secretary Department Railways and Canals.

COPIES OF TENDERS RECEIVED FOR THE ERECTION OF THE CANAL TOLL COLLECTOR'S, CUSTOM HOUSE AND POST OFFICE AT PORT COLBORNE, 14th MAY, 1887.

WELLAND, ONT., 14th May, 1887.

DEAR SIR,—I, the undersigned, do herein agree to furnish and build the proposed canal tolls office and custom house, according to plans and specifications, for the sum of \$3,846.75.

Yours truly,

T. L. NICHOLS,

R. AND J. MILLER, BUILDERS AND CONTRACTORS, PORT ELGIN, ONT., 13th May, 1887.

SIR,—Having examined the plans and specifications of the proposed canal tolls office and custom house proposed to be built at Port Colborne, we hereby offer and undertake to erect and complete the same for \$3,527.

W. Ellis, Esq., Superintendent Welland Canal.

HUMBERSTONE, ONT., 14th May, 1887.

Sin,—Having examined plans and specifications for custom house, canal tolls office and post office to be erected at Port Colborne, we beg to tender for the same; that is to furnish all material and do all work, according to plans and specifications, for the sum of \$3,280.

Yours respectfully,

DICKENSON & SUESS.

W. Ellis, Esq., Superintendent Welland Canal.

WELLAND CANAL.

DETAILED statement showing the cost of erecting wharf or dock at Port Colborne, and material used therein.

Carpenters, handymen, laborers, teams, pile driving, &c. 6,080 lineal feet oak piling, at 15 cents	912 43 38 546 82 18 29	00 20 08	
Total	82,947		

WELLAND CANAL OFFICE, St. CATHABINES, 25th January, 1889.

WELLAND CANAL.

DETAILED Statement of the cost of steam wrecking pumps and boiler; also receipts derived for the hire of same.

November, 1883, steam wrecking pump purchased from Sileby Manf. Co., Seneca Falls, N. Y	\$? ?50	00
15th November, 1884, Quincy boiler and suction pipes, purchased from Inglis & Hunter, Toronto	750	00
Total	\$3,000	00

RECEIPTS for hire or use of steam wrecking pump from the parties mentioned below.

18th August, 1884, Graham, Horne & Co.-

94 25*

1st October, 1884, Sylvester Neelin— 2\frac{1}{2}\ days steam wrecking pump, at \$45 \$112 50 2\frac{1}{2}\ do wrecker, at \$3		40.	- O.t.
	\$	124	38 *
31st July, 1886, Carter Bros.—			
1 day steam wrecking pump \$ 40 00			
1 do engineer and keeper 10 00			
	8	5 0	00†
Total	\$	268	63

[•] Returned Secretary Department of Railways and Canals, 29th June, 1886. Paid over to Auditor General, 21st July, 1886.

† Returned Secretary Department of Railways and Canals, 29th June, 1887. Paid over to Auditor General, 11th July, 1887.

WELLAND CANAL OFFICE, St. CATHARINES, 25th January, 1889.

WELLAND CANAL.

† Réturned Secretary Department of Railways and Canals, 29th June, 1888. Paid over to Auditor General, 5th July, 1888.

WELLAND CANAL OFFICE, St. CATHARINES, 25th January, 1889.

OTTAWA, 8th July, 1887.

SIR,—Replying to your letter of the 9th March last, stating that the probable amount required for the repairs on the Wellard Canal, for the fiscal year ending the 30th June, 1888, would be \$31,448.

I am directed to inform you, that Parliament at its last Session, made an appropriation of \$76.000 for the repairs required on the Welland Canal, and to authorize you to expend that sum for the purpose mentioned.

Although the expenditure of this amount is hereby authorized, it will be necessary for you to communicate with the Chief Engineer of Canals, as to what repairs are to be done and also as to the mode of executing them.

I am, sir, your obedient servant,

A. P. BRADLEY, Secretary.

W. Ellis, Esq., Superintendent Welland Canal, St. Catharines.

^{*} Returned Secretary Department of Railways and Canals, 29th June, 1887. Paid over to Auditor General, 11th July, 1887.

WELLAND CANAL.

VOUCHERS - July, 1869, to 30th June, 1870.

Pay-list in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 1, during the month of July, 1869, to Carpenters on Repairs, Lock Gates, Bridges, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Carpenter	do do do	John Hemming	24 do 27 do 25 do 24 do	1 50	\$ cts. 44 00 42 00 47 25 37 50 24 00 67 50 262 25

PAY LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 2, during the month of July, 1869, to Banks, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do d	do	James Smith	151 do 182 do 144 do 151 do 1 do 124 do 192 do 27 days 17 do 18 do 1 do 27 days 27 days 27 do 27 do 28 do 29 do 20 do 21 do 21 do 21 do 22 do 23 do 24 do 24 do 25 do 26 do 26 do 27 do	1 00 1 00 1 00 1 00 1 00 3 00 1 00 1 00	\$ cts. 14 00 15 25 18 50 14 25 15 25 4 60 1 50 24 50 19 50 40 00 27 00 17 00 13 00 2 50 1 50 3 00 27 00 27 00 3 00 27 00 3 01 26 00 27 00

PAY-LIST in duplicate of persons employed on the Weilard Canal, Sheet No. 2 Division No. 3, during the month of July, 1869, to Laborers on Repairs, Banks, &c., from Thorold to Colborne, chargeable to Ordinary Repairs.

Capacity.	When employed	Names.	Time.	Rate.	Amount.
Laborer	do .	Jos. Numan	23] do 144 do 161 do 171 do 184 do 23 do 24 do 10 do 1 do	2 50 2 00 1 75 1 50	\$ cts. 25 50 23 50 23 50 14 75 25 00 18 25 17 25 18 25 28 00 20 00 25 00 25 00 2 50 0 75 12 26 15 00 3 75 266 50

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 4, during the month of July, 1869, to Labor, &c., on Repairs of Break of Embankment at Dunnville, chargeable to

Capacity.	Capacity. When Employed			Time.		Time. Rate.		Amount.	
						\$ cts		\$ cts.	
Labor	July, 186	9 .	John Patterson	26	days	2 00	1	52 0 0	
do	do	•••	Wm. Simpson	7½ 15¼	do	1 25 1 00		25 12	
do				8 114		1 25 1 00	}	21 75	
₫o				194		1 00		19 25	
do			John Thrush	2	do	1 00		2 00	
do			James Thrush		do	1 06		18 00	
do	do		Thos. McKey John Secord		do	1 00 2 50	ı	4 00 15 00	
Team hauling	do do		John Reid	-	do	1 75		10 50	
Laborer			John Lucy	7	do	1 00		7 60	
Team hauling	do		Alfred Boarke		do	2 50		25 00	
Laborer	do	•••	Hicam Fite	5	do	1 00		5 00	
do	do		Horatio Jennings	201		1 00		20 25	
d o	do		Rolland Secord	6	do	1 00		6 00	
do	do		E. Hepson			1 00		4 50	
'do	đo		Martin Fite		do	0 62	4	11 09	
do	do		Wm. Wilson	13	do	1 60	-	1 50	
Team hauling and labor	do	••••	Wm. Brooks	1	do	1 00 2 50		4 75	
Carpenter	do		Robert Stevens	45	do	1 23	1	5 62	
Foreman on scow			Patrick Kelly		do	1 25	.	8 75	
Laborer			Wm. Kelly		do	1 00)	6 50	
do	do		James Feeney	6	do	1 00		6 00	
do	do		Alex. Hannah		do	1 00		6 00	
do	do	•••	C. Lynch	5	do	1 00)	5 75	

PAY-LIST in duplicate of persons employed on the Welland Canal, &c.—Continued.

Capacity.	When Employed.	Names.	Time.	Rate.	Amount.
Lahoro-			-	\$ cts.	\$ cts.
Laborer do	July, 1869	John Shanahan	2 days	1 00	2 00
d - ***********************************	ďo	Michael Shanahan	6 do	1 00	6 00
do	do	Alex. Brown	3 do	1 00	3 00
A	do	Francis Oades	5½ do	1 00	5 25
do	do		14 do	1 00	1 75
do	do	Philip Gunnel	4½ do	1 00	4 50
go	do	James Clancy	6 do	1 00	6 00
40	do	Robt. Crum	$\frac{3\frac{1}{2}}{2}$ do	1 00	3 50 6 00
40	do		6 do	1 00	3 50
******	do do		3½ do	1 00	5 25
40	_	Archibald Oades	54 do		6 00
uo	do		6 do	1 00	4 50
	J .		4½ do	1 00	3 00
			3 do	1 00	13 50
Laborer on do	do		9 do	1 50	9 60
do	3	John Corbett	9 do	1 00	6 25
do		lo o Ye	64 do	1 00	8 90
do	.		8 do	1 00	6 50
qo	do	Michael McAuliffe	61 do	1 00	6 50
do .	do	T.1 35 *	7½ do	1 00	7 75
do	do		7 do	1 00	7 50
do		Patrick Murphy	7 do	1 00	7 00
do	do		73 do	1 00	7 75
do	do	Peter Seburn	73 do 73 do	1 00	7 75
do	do	John Moriarty		1 00	5 50
do	do		61 do	1 00	6 50
do	do		64 do	1 00	6 50
B. do	1	Thos. Woods	5 do	1 00	5 50
Horse towing scow from Junc-	1		02 40	1 00	
WULL WE OUT COIDOFNE AT hear	do	. Joseph Fegan			5 00
Laborerdo	do	James Smith	7 days	1 00	7 00
Taharar	do	James Gunning	7 do	1 00	7 00
Laborer on scow	do	. Thos. Hutchinson	7 do	1 00	7 00
do	do	. Wm. Boyle	7 do	1 00	7 00
do	do	. Ben. Baker	6 do	1 00	6 00
do .,,	do	. Robt. Morrison	5 do	1 00	5 00
do	do	. Solomon Carle	41 do	1 00	4 50
do	do	. Martin Jassey	4 do	1 25	5 00
dodo	do	. Tim. Sullivan	. 4 do	1 25	5 00
_ do	do	. Geo. Latimer	4 do	1 25	5 00
Two months at Dunnville	do .		3 do	1 25	3 75
\$30. Wages as look tonde					
Paid, and another man am	1		1		Į.
		Ben. McMahon	2 months	15 00	30 00
2	oh L	Louis Fox, sen	5 days	1 00	5 00
4-	do l	Louis Fox, jun	5 do		5 00
3	ماء ا	Nelson Bourk	. 5½ do		5 50
3	. ს ინი	Wm. Rodgers	. 24 do		2 78
	do .	Robt. Stevens	. 3 do		3 00
3	· do .	Patk. Warren	. 41 do		5 63
ā	· ao .	Geo. Hicks	do		0 50
	· ao .	Patk. Hunter	. 47 do		4 50
do	· ao .	Edwd. Cooper	. 31 do		3 5
Team hauling	· go .	Robt. Quinn	. 7 do		7 0
	ao .	Wm. Brooks	. 21 do		5 6
Dunnville	L)		May, 6 d.	. 13	
***************************************	May, June	O J. Phelps	June, 26 d July, 8 d	.]]	160 0
. .	į	į.		11	1
Laborer	Tul- 100	N T-1 - G	40 d	.[]	i
	. July, 186	9. John Scott			24 0
40	· ao .	John Hughes	. 19 do	. 1 00	19 0
do	· do .	Alonzo Fite	. 3 do	. 1 00	3 9
************************	∙l do .	Peter Collins	. 5½ do	. 1 00	5 50

ACCOUNTS.

Date.		DEPARTMENT OF PUBLIC WORKS.	\$	cts.	\$	cts.
186	39.	Dr. to R. Quider.				
July :	31 31	To 2 days' caulking scow, at \$2.50		5 00 1 00		6 0 0
		DR. TO A. McDonald.				0 00
July :	31	To 49 days' board, men, at 50 cts				24 50
		Dr. to David Price.				
do	31 31 31	To 27 weeks and 21 days' board, men, at \$3		82 00 4 63 3 18		89 81
*		Dr. to Tug "P. Bennett."				08 01
do :	31 31 31 31	To 8 days' work, at \$12 per day		96 00 12 75 10 62 2 36		121 73
		Dr. to Wm. Braund & Co.	İ			
May June July June do	29 7 5 9	10 lbs. cut nails, 40 cts.; 1 wrought nails, 10 cts		1 10 0 25 0 50 2 13 0 50		4 4
		Dr. to Welland Railway Co.			-	
do do	31 31 31 31	Use of engine, fuel, oil, &c		16 50 20 00 3 75 21 00		61 2

ACCOUNTS chargeable to Welland Canal, Repairs, Dunnville Break.

)ate.	Nature of Work.	\$	cts.	\$	cts.
,	1869.					
Julv	31	Alfred Bourke, 110 yds. gravel, at 60 cts			66	00
go	31	William Brooks, 105 do 60 cts				00
do	31	John Hammond, 92 do 60 cts				20
do	31	William Ward, 104 do 60 cts				40
do	31	Edward Brown, 50 do 60 cts				00
		James Ramey, 10 meals, J. Feagan and men, at 25 cts			2	50
do	31	B. McMahon, 5 weeks, 5 days, board to men, at \$13 per month.			17	15
do	31	Thomas Drake, repairs, 550 lbs. iron, at 4 cts			22	00
do	31	Robert McNeil, 44 days' board to men, at 50 cts			22	00
do	31	John McNeal, 38 do at 50 cts			19	00
дo	31	R. Ouider—				
		2 days' caulking scow, at \$2.50		5 00		
		Oakum		00		
					6	00
ďο	31	A. McDonald, 44 days' board to men, at 50 cts			24	50
ďο	31	David Price -		1		
		27 weeks, 21 days' board to men, at 50 cts	89	2 00		
		Horsekeep and meals furnished	,	7 81		
		•			89	81
				-		
		Total			479	56
do	31	Tug "P. Bennett"—		- 1		
		8 days' towing scow, at \$12	a.	6 00 l		
		41 cords wood, at \$3		2 75		
		41 do \$2.50		0 62		
		Tallow and oil	_	2 36		
					121	73
do	31	Wm. Braund & Co.—		- 1	,	
		2 doz. bolts, \$1.10; 2 qts. coal oil, 25 cts		1 35		
		10 lbs. cut nails, 40 cts.; 1 lb. wrought nails, 10 cts	(0 50		
		10 galls. coal oil, \$2.13; lamp burner and wicks, 50 cts		2 63		
					4	48
ďο	31	Welland Railway Co.—	1			
		l foreman. \$3; 9 laborers, \$9; 3 do., \$4.50	1	6 50		
		Use of engine, fuel, oil, &c	2	0 00		
		Use of engine, fuel, oil, &c		3 75		
		Freight on 3 cars old iron, at \$7	2	1 00		
		, .	<u> </u>		61	25
		Total		-	007	02

S. D. WOODRUFF, Superintendent.

PAY-LIST in duplicate, of persons employed on the Welland Canal, Sheet No. 2, Division No. 1, during the month of August, 18 9, to Carpenters on Repairs, Lock Gates, Bridges, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

Capacity.	When employed.		Names.	Time. Rate.			Amount.	
Carpenter	do do do do do do do do		James Ferris	25 do 41 do 12 do		cts. 2 00 1 75 1 50 1 12½ 1 50 1 50 1 50 1 50 1 50 1 50 1 50	\$ cts. 57 00 51 60 40 50 30 94 27 75 38 25 6 75 18 75 76 50	

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 2, Division No. 2, during the month of August, 1869, to Laborers on Repairs, Banks, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

Capacity.	When Employed.	Names.	Time.	Rate.	Amount.
Laborer. Team hauling	do do	James Collier Jas. Hamilton Edwd. Grant Jas. Flewallen Michael Maloy John Collins John Davis Fred. Scherdon George Fisher Robt. Boyle Wm. Wilson Thos. Bradley, sen B. Clarke. Dan. Meaghen Silas Rose Peter Coons. James Smith James Gunning John Fisher Wm. Laughlan Edwd. Manly James Clarke. Patk. Garner Michael Caffrey I. McMahon do Wm. Assell	2½ do 24 days 24½ do 12 do 10 do 2 nights 2 do 3 do 1 do 1 do 15 do 25 do 26 do 27 do 28 do 17 do 26 do 27 do 28 do 29 do 17 do 21 do 21 do 22 do 21 do 22 do 23 do 24 do 25 do 26 do 27 do 28 do 29 do 21 do	\$ cts. 1 00 3 00	15 50 7 50 16 00 14 00 24 00 24 50 12 90 12 00 10 00 2 00 2 00 2 00 2 00 2 00 2
Making measurements and maps	do	Edwd. Gardner	9 do	1 00	27 00
					436 50

PAY LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 3, during the month of August, 1869, to Laborers on Repairs Banks, &c., Thorold to Colborne, chargeable to Ordinary Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Laborer	do do do do do do do do do do do do do	Jos. Numan	22½ do 23½ do 26 do 26 do 26 do 26 do 27½ do 7½ do 24 do 24 do 2 do 3 do	1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00	\$ cts. 25 75 22 50 23 76 32 50 26 00 26 00 26 00 27 75 7 50 24 00 2 00 32 50 32 50

Accounts Chargeable to Welland Canal, Repairs, Dunnville Break.

						_
Date.	Nature of Work.	\$	cts.	\$		cts
1869. August	William Brooks— 170 yards gravel delivered on embankment, at 60 cts 5 days, team blending gravel, at \$2.50 John Secord— 43 yards gravel delivered on embankment, at 60 cts 5 days, team blending gravel, at \$2.50	25 12		1	16 48 88	30 00
	John T. Johnson— 14 days caulking scow, at \$2.50		3 75 1 88) 70			33 50
	Total			_	675	

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 4, during the month of August, 1869, to Laborers on Repairs, Break of Embankment at Dunnville, chargeable to Extraordinary Repairs.

Capacity.	When employed.	Names.	Time.	Rate.	Amount.
Laborer, &c	do do do do do do June, 1869	John Patterson	27 do 26 do 21½ do 5½ do 23 do 10 do 5 do 2 months. 19¾ days 4 do	1 00 1 00 1 00 1 00 1 00 1 00 1 00 25 00 0 25 1 75	\$ cts. 54 00 27 00 26 00 21 50 5 50 23 00 10 00 5 00
					232 82

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 1, during the month of September, 1869, to Carpenters on Repairs, Lock Gates, Bridges, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

Capacity.	When employed.	Names.	Time.	Rate.	Amount.
Carpenter	do do do do do do do do do	En. Grant	days 1 night, 25\frac{3}{4} days 26 days 25 do 25\frac{1}{2} do 25\frac{1}{2} do 25\frac{1}{2} do 25\frac{1}{2} do 25\frac{1}{2} do 25\frac{1}{2} do 25\frac{1}{2} do 25\frac{1}{2} do 25\frac{1}{2} do 25\frac{1}{2} do 25\frac{1}{2} do 25\frac{1}{2} do 25\frac{1}{2} do 25\frac{1}{2} do	\$ cts. 2 00 1 75 1 75 1 50 1 121 1 50 1 50 1 50 1 50 1 50 1 50 1 50 3 00 3 00	\$ cts. 48 00 46 81 45 50 37 50 28 41 38 63 25 12 25 00 3 00 38 63 25 00 70 50 6 00 438 10

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 2, during the month of September, 1869, to Laborers on Repairs, Banks, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

	Capacity.	Who emplo		Names.	Time.	Rate.	Amount.
Laborer o	n scow	Sent	1869	J. C. McMahon	26 days	\$ cts.	\$ cts
do		do		Jas. Gumming	29 do	1 00	26 00
do		do	•••		29 do	1 00	29 00 29 00
do		do	•••	Wm. Lauchlan	27 do	1 00	27 00
do		do		Enc. Manlay	22 do	1 00	22 00
do		do	•••	Jas. Clark	28 dol	1 00	28 00
do		l do		Patrick Gardner	28 do	1 00	28 00
do		do	•••		28 do	1 00	28 00
do	***************************************	do	•••	James Murphy	18½ do	1 00	18 50
do do		do	•••	John Davis	24 do	1 00	24 00
do		do		John Collins		1 00	26 00
do	***************************************	do	•••	Daniel Meagher		1 00	22 00
do		do do	•••	Fred. Sherran	11 do	1 00	11 00
de		do	•••	John Sullivan		1 00	2 50
Horse tov	ving scow	do	•••	John Naster	l night	1 00	1 0
Laborer		do	•••	J. U. McMahon John Burns	lo days	1 00	16 0
do .	············	do	•••	Isrl. Labey	94 do	1 00	9 50
	••••	do	•••	Isrl. Dalaney	143 do	1 00 1 00	14 78
	••••••	do	•••	Thos. Boyle	144 do	1 00	14 7
do .	••••••	do		Alex. Flammary	94 do	1 00	9 50 8 2
	• • • • • • • • • • • • • • • • • • • •	do	•••	John Delaney	16½ do	1 00	16 2
	• • • • • • • • • • • • • • • • • • • •	do	•••		5 do	1 00	5 50
		do		Michael Maloy	25 do	1 00	25 00
, do .		do	•••		184 do	1 00	18 50
No. 3, 3	ock No. 2, \$5; Lock 10; Lock No. 3, \$2;				-		20 0
Haw room	o. 10, \$2	do	•••	Wm. Cunningham	19 do	1 00	19 00
Laborer	ired	do	•••	Enc. Grant		1 00	24 00
	·····	do	•••	Chas. Hill		8 00	34 0
	·····	do do	•••	Wm. Cavers		1 00	2 0
_	·····	do	•••	John Strang		1 00	1 50
	· • • • • • • • • • • • • • • • • • • •	go	•••	James Philip		1 00	1 00
•	·····		•••	Wm. Williams Samuel Booth		1 00	2 00
	•	do		James McCabe		1 00	1 00
	· · · · · · · · · · · · · · · · · · ·	do	•••	James Couglan	2½ do	1 00	2 50
	••••	do	•••	Thos. Flynn	do	1 00 I 1 00 I	0 5
	••••••	do	•••	1 4 3 200 .		1 00 1 00	0.50
do .	********	do	•••	Thos. Turner	1 , , ,	1 00	2 0 1 0
	••••••	do		Wm Fezan	4 do	1 00	0 5
		do		Jno. McNamara	1 do	1 00	1 0
		do	•••	Wm. Burlay	1 do	1 00	1 0
		do		Robt. Bradley	11 do	1 00	1 5
	• • • • • • • • • • • • • • • • • • • •	do		Frank Weaver	2 do	1 00	2 50
		do		Stephen Nama	1 do	1 00	1 00
	•••••	do		Bart. Clark	⅓ do	1 00	0.50
		do.	•••	Robt. Gibson	3 do	1 00	3 0
		do	•••	Jas. McAuley	1 do	1 00	0.5
	•••• •••••	do		Wm. Cochran	1 do	1 00	1 0
	••••••	do		Wm. Chace	4 do	1 00	4 0
		do		Wm. Assill	26 do	1 00	26 0
Team her	!	do		Jos. Palmer	1 do	1 25	1 2
-cam ust	lling	do	•••	George May	6 1 do	3 00	19 50

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 3, during the month of September, 1869, to Laborers on Repairs, Banks, &c., from Thorold to Colborne, chargeable to Ordinary Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Foreman on scow. Laborer	do d	Patrick Kelly John Corbett Ben. Redfern Michael McAuliff Wm. Kelly Thos. Dornington John Foster James Clancay Timothy Sullivan Peter Collins Brian Flin Alex. Hannah Michael Sullivan Patrick Dalton Patrick Murphy Wm. Broom James Numan James Numan James Herdman Tim Kinney Alex. Shields Daniel Kelly William Hannah Peter Winterwood. John Haviston John Hoise	26 do 26 do 25 do 26 do 26 do 27 do 28 do 24 do 224 do 245 do 225 do 225 do 225 do 225 do 225 do 25 do	\$ cts. 1 25 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 0	\$ cts. 32 50 26 00 26 00 26 00 26 00 15 75 24 50 25 00 23 25 24 00 22 50 23 25 21 50 8 50 24 25 22 75 20 00 52 50 15 50 15 50

PAY LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 4, during the month of September, 1869, to Laborers on Repairs, Banks, &3., at Dunnville, chargeable to Ordinary Repairs.

Capacity	When Employed	Names.	Time.	Rate.	Amo int.
Carpenter	do do Aug., 1869 Sept., 1869 do do	John Patterson	8 do 2 do 20½ do 8 do 8 do 3 do	1 00	\$ cts. 34 00 8 00 2 00 2 00 50 8 00 8 00 8 00 15 31

Accounts chargeable to Repairs, Welland Canal.

	Nature of Work.	\$	cts.	\$	cts.
1869. Sept	Daniel Glass— 44\(\frac{1}{2}\) days painting, at \$1 50	5 1 1 6 6 0 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50 80	2154 154 111	30 44 50 1 50 1 50 1 50 1 50 1 50 1 50 1

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 1, during the month of October, 1869, to Carpenters on Repairs, Lock Gates, Bridges, &c., from Dalhousie, chargeable to Ordinary Repairs.

Capacity.	When Employed	Names.	Time.	Rate per day.	Amount
Carpenters	do do do do do do do do do	James Jarvis	1 night 25 days 22 do	1 75 1 75 1 50 1 50 1 50 1 50 1 100 1 100 3 00	25 00 27 00 79 50 15 00
					475 87

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 2, during the month of October, 1869, to Laborers on Repairs, Banks, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

Capacity.	Wh Empl	Names.	Time.	Rate.	Amount.
Laborer do do do do do do do do do do do do do	Oct., do do do do do do do do do do do do do	John Burns	193 do 193 do 195 do 254 do 255 do 255 do 255 do 256 do 256 do 242 do 242 do 244 do 242 do 245 do 25 do 21 do 21 do 22 do 25 do 25 do 25 do 25 do 25 do 25 do 25 do 25 do 26 do 27 do	1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00	\$ ct 20 7: 19 74 19 56 5 24 75 25 56 25 56 10 56 24 76 24 76 24 50 24 50 25 00 25 00 25 00 25 00 25 00 26 00 27 00 28 00 28 00 29 00 20 00

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 3, during the month of October, 1869, to Laborers on Repairs, Banks, &c., from Thorold to Colborne, chargeable to Ordinary Repairs.

Capacity.	When Employed	Names.	Time.	Rate per day.	Amount.
Laborer on repairs	do d	Tim Kennedy James Herdman Peter Seburn Patrick Kelly Beu. Redferrin Michael McAuliffe Thos. Dorrington Wm. Kelly John Foster Tim Sullivan Peter Collins Bryson Flynn Alex. Hannah Michael Sullivan	21½ do 20¼ do 9 do 16½ do 22¼ do 25½ do 25½ do 21½ do 21½ do 21½ do 21½ do 21½ do 21½ do 19 do 19 do 17¾ do 21½ do 15½ do 21½ do 22¼ do 21½ do 22¼ do 22½ do 22½ do 22½ do 22½ do 26 do 9 do	1 00 2 25 1 25 1 00 1 00	\$ cts. 22 00 21 25 20 025 9 00 32 50 16 75 22 75 16 25 25 50 16 25 22 25 23 00 21 00 19 00 20 25 19 00 17 75 22 50 18 25 15 75 9 25 26 00 50 00 32 50 26 00 9 00 559 00

PAY-LIST in duplicate of Persons employed on the Welland Canal. Sheet No. 2, Division No. 1, during the month of November, 1869, to Carpenters on Repairs, Lock Gates and Bridges, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Carpenter	do do do do do do do do do do do do	James Dell. John Henning. Wm. Flewallen. Jas Ferris. Harmon Plumsted. Alex. Walker Wm. Smith	26 do 26 do 25 do 25 do 26 do 27 do 28 do 29 do 21 do 21 do 22 do 25 do 26 do 26 do 26 do 27 do 28 do	\$ cts. 2 00 1 75 1 75 1 12½ 1 50 1 50 1 50 1 00 1 00 1 25 1 25 1 00 3 00	\$ cts. 52 00 45 50 45 50 29 25 37 50 37 50 37 50 37 50 26 00 26 00 23 75 1 87 6 00 55 50

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 2, Division No. 2, during the month of November, 1869, to Carpenters on Repairs, Banks, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

Capacity.	When Employe	d	Names.	Т	ime.	Rate.	.	Amoun	ıt.
Laborer	do do do do do do do do do do do do do d	•••	I. McMann	25 ¹ 25 ¹ 24 25 ¹ 25 ¹ 25 ¹ 25 ¹ 25 ¹	do do do do do do do do do do do	1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00	•	25 25 25 24 25 25 25 25	00
August, September, October and November. Laborer. do do do do do do do do do do do do do	do do do do do do do do do do do		Edwd. Gardiner Dan. Glass	15 16 15½ 17 16½ 25 15½ 18½ 4	days do do do do do do do do do do do do do do do	15 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00		15 16 15 17 16 25 5 18 4 26 26 3	5 00 6 00 6 00 6 50 7 00 6 50 6 50 8 50 8 50 9 00 9 00

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 3, during the month of November, 1869, to Laborers on Repairs, Banks, &c., from Thorold to Colborne, chargeable to Ordinary Repairs.

Capacity.	Who Emplo	Names.	1	lime.	Re	ate.	Amou	nt.
Laborer	Nov., do do do do do do do do do do do do do	Jos. Numan	834 74 24 26 19 24 22 25 25 25 25 21 24 19 25 19 26 16 16 16 16 16 16 16 16 16 16 16 16 16	do do	\$	cts. 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 0	8 7 300 26 19 24 22 25 18 20 20 19 15 17 15 19 2 2 16 18 19 24 45 7	75 00 00 50 50 50 50 50 50 50 50 50 50 50

ACCOUNTS Chargeable to Welland Canal, Repairs for November, 1869.

***************************************			<u> </u>
Date.	Nature of Work.	\$ cts.	\$ cts.
1 8 69.	ALEX. MUIR.		
Oct. 19 do 19 do 19 do 19	To 2 pieces oak timber, 90 c. ft., at 20c	3 06 2 25	27 06
	Tues "Bennett" and "Secord."		2. 00
Nov. 23, 24	To 2 days' work on feeder breaking ice		25 00
	ROBERT HENRY.		
Nov. 23, 24 do do do do	To Repairs rag bolts, 151 lbs., at 1½c	2 88 4 62 0 25	11 12
37	WILLIAM RUNCHY.		
™0¥. 23, 24	To 216 meals furnished men making repairs, Port Dalhousie, at		43 20
		•	106 38
_			

PAY LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 2, Div. No. 1, during the month of December, 1869, to Carpenters on Repairs, Lock Gates, Bridges, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

Capacity.	When Employed.	Name.	Time.	Rate.	Amount.
Carpenter	do do do do do do do do do	Edward Grant	15 do 14 do 15 do 13 do 13 do 13 do 15 do 15 do 15 do	1 75 1 75 1 12½ 1 50 1 50 1 50 1 50 1 50	\$ cts. 30 00 26 25 24 50 16 87 22 50 20 25 20 63 22 50 15 00 15 00 39 00
•					252 5 0

PAY LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 2, Division No. 2, during the month of December, 1869, to Laborers on Banks, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

Capacity.	When Employed.	Names.	Time.	Rate.	Amount.
Laborer on banks	do do do	Mich'l Maloy	5 do 27 do 2 do	1 00 1 00	\$ cts. 7 00 5 00 27 00 6 00 8 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 2, Division No. 3, during the month of December, 1869, to Laborers on Repairs, Banks, &c., from Thorold to Colborne, chargeable to Ordinary Repairs.

Capacity.	When Employee	Names.	Time.	Rate.	Amount.
Laborer on repairs, banks, & do do do do do do do do do do do do do	do . do . do . do . do . do . do . do .	Jas. Numan Peter Seburn Pat'k Kelly John Corbett Ben. Redfern Mich'l McAuliffe. Thos. Dorrington Wm. Kelly. Con. Lynch Robert Grisdale Angus McIntosh Jas. McCoppen Alex'r Shields Oscar Upper Willis Upper Jas. Upper Jas. Upper Jas. Upper Jas. Upper Jas. Upper Jas. Upper Jas. Upper Jas. Upper Jas. Upper Jas. Upper Dan'l Kelly John Bruce James Waters Wm. Higgins James Upper Peter Wintermoot John Harriston	41 do 13 do	\$ cts. 1 00 1 00 1 25 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 0	\$ cts. 12 00 4 50 20 00 13 00 9 00 7 50 9 00 1 00 1 00 1 00 1 00 1 1 02 1 1 25 1 25 9 00 9 00
					244 75

ACCOUNTS Chargeable to Welland Canal, Repairs.

Date.	Nature of Work.	\$ cts.	\$ cts.
1868.	W. H. Jones.		
May 27 July 7 Aug. 18 Sept. 11 do 17	Spring on stone bridge lamp	0 10 0 20	
	do	0 05 0 10 0 18	1 93:
_ 1	To 33 meals, at 25c. per meal	8 25 2 00	10 25

PAY-LIST, in duplicate, of persons employed on the Welland Canal, Sheet No. 2, Division No. 2, during the month of January, 1870, to Laborers, from Dalhousie to Thorold, &c., chargeable to Ordinary Repairs.

Capacity.	When employed.	Names.	Time.	Rate.	Amount.
Laborer Overseer, Dunnville embank- ment.	· '	Wm. Assell	26 days 26 do	\$ cts. 1 00 1 50	\$ cts. 26 00 39 00 65 00

PAY-LIST, in duplicate, of persons employed on the Welland Canal, Sheet No. 2, Division No. 3, during the month of January, 1870, to Laborers, on Repairs, Banks, Ditches, &c., from Thorold to Colborne, chargeable to Ordinary Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Laborer	do do do do do do do	Jas. Numan Patrick Kelly	141 do 111 do 13 do 7 do 53 do 26 do 5 do	1 25 1 07 1 00 1 00 1 00 1 25	\$ cts. 6 00 17 81 11 25 1 76 7 00 5 75 32 50 12 50 47 50

Accounts chargeable to Welland Canal, January, 1870, Repairs.

Date.	Nature of Work.	\$	cts.	\$ cts
1869. Aug. 21 do 18 do 21 Sept. 20 do 27 do 27 do 27 Nov. 24	Hooping tub and sharpening 2 picks	0 0 1 2 0 0	00 75 50 77 09 75 50 50 25	
	M. A. Smith— 820 ft. plank and boards for break at end of toll bridge 416 ft. plank, at \$12	9 4	84 99 40	11 00
Sept. 21 do 22 do 27	$1\tilde{5}_{2}$ lbs. manilla, small, at 19 cts	2	10 94 17	17 23 4 21
April 1 do 6 do 8 do 12 do 14 do 15 do 17	3 barrels cement, at \$1.50	4 6 7 2 2	00 50 00 00 25 50	28 25
			-	60 69

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 1, during the month of March, 1870, to Carpenters on Repairs, Lock Gates, Bridges, &c., chargeable to Ordinary Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Carpenter	do do do	Harmon Plumsted John Henning Chas. Hill Orin Gordis Wm. Walker Jonathan Woodall	6 do 20 do 2 do 8 do	\$ ets. 1 50 1 75 3 00 3 00 1 50 0 87½	\$ ets. 9 00 10 50 60 00 6 00 12 00 9 19

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 3, during the month of March, 1870, to Laborers on Repairs, Banks, &c., chargeable to Ordinary Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do	Mar., 1870. do	John Gunning Michael Joyce John Beatty John Collins John Morgan Jas. Kaller Edward Manly Dan. Meagher Jas. Hair Bernard Brennan Thos. Carson Wm. Reardon Patrick Garner Wm. Fahey John Sheehan John Hanniberry Michael Maloy	days 11 days 11 days 11 days 954 do 954 do 16 do 914 do 915 do 915 do 915 do 915 do 915 do 915 do 915 do 915 do	\$ cts. 0 871/6/16/16/16/16/16/16/16/16/16/16/16/16/	\$ cts 12 03 9 63 10 06 8 53 14 00 6 34 5 25 9 19 8 09 7 66 6 78 8 31 5 25 6 13 7 22 8 09 6 78 11 38
do	do do do do do do do	Wm. O'Neill. Michael McCarthy Wm Kaylor Edward Coyle Patrick Benton Gabriel Pocock John Pocock Wm. Pocock Wm. Pocock Dennis Crowley Wm. Assell	7 do 5 do 14 do 17 do 73 do 73 do 74 do 72 do	0 875 0 875 0 875 0 877 2 00 2 00 2 00 1 00	7 00 6 1. 4 3 12 2 14 8 15 5 15 5 15 6 14 7 27 0

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 3, during the month of March, 1870, to Laborers on Repairs, Banks, &c., from Thorold to Colborne, chargeable to Ordinary Repairs.

Capacity.	When Employed.	Names.	Time.	Rate per day.	Amount.
Making wheelbarrows	do do do	John Bruce	9½ do 5 do 2 do 2 do 6 do	\$ cts. 1 25 1 25 0 874 0 875 0 876 0 876 2 50	\$ cts. 32 50 11 88 4 38 1 75 1 75 5 25 26 25

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 1, during the month of April, 1870, to Carpenters on Repairs, Lock Gates, Bridges, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Carpenter	do do do do do do do do do	Edward Grant	17 do 30 do 26 do 17 do 10 do 11 do 21½ do	1 75 1 75 1 12½ 1 50	\$ cts. 66 00 54 25 45 50 19 13 45 00 26 00 17 00 10 00 5 50 21 50 72 75 382 63

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 2, during the month of April, 1870, to Masons, Laborers on Banks, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

	1		1	1	
Mason do do do do do do do do do do do do do	do do	John Pocock Thomas Pocock William Pocock William Pocock Daniel Crowley Arthur Boyle George Boyle Wm. Walsh James Delaney Robert Gibson Bart Clark Tom Flynn Martin Nestor James Bradley Wm. Wilson Chas Kelly John Collins Wm. Clark Duncan McPhee Thomas Boothe Wm. Keer Samnel Fisher	13½ do 13 do 13 do 17½ do 17½ do 7 do 3 do 5 do 3 do 2 do 2 do 14 do 13½ do 14 do 13½ do 11½ do 11½ do 11½ do 10½ do	\$ cts. 2 00 2 00 2 00 2 00 2 00 1 00 2 00 1 00 1	\$ cts. 29 00 27 09 26 00 26 00 13 50 35 00 25 00 15 00 3 00 2 00 3 00 2 00 14 00 13 50 14 00 13 50 10 00 10 50 10 50 10 50 10 50 10 00 10 50 10 00 10 9 00
do do Team hauling Laborer do do do do do do do do do do do do do	do do	Edward Artlinson Daniel Leary Joseph Docherty Michael Maloy (wife) John Collins Wm. Caylor Darious Corney Wm. O'Neill Isaac McMahon Jas. Guinning Wm. Laughlin Patrick Garner Edward Manly John Fisher	10 do 8 do 24 do 26 do 1 do 1 do 1 do 25 do 224 do 244 do 234 do 234 do 234 do 234 do 23 do 11 do 11 do 25 do 21 do 21 do 21 do 22 do 3 do 11 do 11 do 11 do 11 do 11 do 11 do 11 do 11 do 11 do 11 do 11 do 11 do 11 do	1 00 1 00 1 00 1 00 1 00 1 00 1 00 1 00	10 00 8 00 7 50 26 00 1 00 1 00 25 50 12 50 24 75 24 50 23 50 4 00 25 00 19 50 23 50 11 00 11 50 19 00 8 00 8 00 12 00 8 00

PAY-LIST in duplicate of Persons employed on the Welland Canal. Sheet No. 2, Division No. 3, during the month of April, 1870, Laborers on Repairs, Banks, &c., chargeable to Ordinary Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Laborer do do do Repairing wheelhouse Laborer do do do do do do do do do do do do do	do do	John Bruce Patk. Kelley John Corbett. Benj. Redfern Michael McAuliffe. Alex. Shields. Jas. Anderson. Oscar Upper. Dan. Kelley. Peter Wintermood. John Harriston. David Ramsy James Thrush Francis Ramsay, jun. Ira Brassie John Scott, jun. Robt. Scott. David Hicks George Hicks Lewis Bessie. Alfred Fite. John Scott, sen. Thos McKie. Wm. Ward John Logan. Wm. Logan. John Thrush	18 do 16 do 24 do 21½ do 19½ do 19½ do 19½ do 12½ do 12½ do 12 do 12 do 12 do 12 do 11 do 11 do 11 do 1 \$ ets. 1 00 1 25 1 25 1 00 1 00 1 00 1 00 2 50 2 50 2 50 1 25 1 00 3 00 1 00 1 00 1 00 1 00 1 00 1 00	\$ cts 24 00 18 00 20 00 30 00 19 50 19 50 19 50 20 00 7 59 5 00 21 50 22 50 21 50 21 50 11 00 7 25 7 00 11 00 7 00 8 00 3 00 3 00 3 00 1 25 1 00	

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 1, during the mouth of August, 1869, to Office Establishment, Paymaster, Clerk, &c., chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Paymaster and Clerk	Mar., 1842 Aug., 1852	Thos. Adams Wm. Cook	1 month 1 do	120 00 12 00	\$ cts. 120 00 12 00

PAY-LIST, in duplicate, of Persons employed on the Welland Canal, Sheet No 1, Division No. 2, during the month of August, 1869, to St. Catharines Establishment, Herdor Master, Head Carpenter, Lock and Bridge Tenders, from Dalhousie to Thorold, chargeable to Maintenance.

Capacity.	When Employed	Nam:s.	Time.	Rate.	Amount.
do assistant No. 2	Apr., 1843 May, 1856 Apr., 1853 July, 1856 W. C. Co. Apr., 1845 July, 1854 May, 1865 July, 1854 May, 1855 July, 1854 Sept., 1853 May, 1855 June, 1849 July, 1866 June, 1849 July, 1866 June, 1848 June, 1853 June, 1854 June, 1853 June, 1854 June, 1855 June, 1856 June	Jas. Woodall Thos. Barrett. Wm. Chace John Nestor. Wm. Walker Jas. Malpass Frank Meagher Michael Driscoll. James Bradley. Daniel McCarthy Edward Boyle Bart. Clarke John Reilly Jas. Conger Thos. Flynn. Geo. A. Daily. Michael Moran. Wm. Cochrane Wm. Cavers John Strong Jas. McCabe Wm. Williams Andrew Taggart James Phillips Thos. Turner Wm. Fegan Jas. Flewallen Benj McMahon Rufus Swazze.	1 do 1 do	\$ cts. 93 75 75 00 34 00 34 00 30 00	\$ cts. 93 75 75 00 34 00 34 00 30 00
					1,132 75

PAY LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 3, during the month of August, 1869, to Port Robinson Establishment, Carpenter on Repairs, Regulating Water Lock and Bridge Tender, from Thorold to Junction, Chargeable to Maintenance.

Carpenter on repairs, Thorold Junction and Marshville. Foreman and charge of water at Allanburgh. Lock Foreman, Allanburgh. April, 1861. John Bruce. 1 do 30 00 30 00 do Assistant do Sept., 1865. Wm. Upper. 1 do 30 00 30 00 do Assistant do April, 1850. Lock Foreman, Thorold. April, 1850. Araon Higgins. 1 do 30 00 30 00 do do Assistant do April, 1850. Lock Foreman, Pt. Robinson July, 1851. Wm. Higgins. 1 do 30 00 30 00 do do April, 1850. Lock Foreman, Pt. Robinson July, 1851. John Watson 1 do 30 00 30 00 do Assistant do Aug, 1866. Chas. Hannah 1 do 30 00 30 00 do Assistant do Aug, 1866. April, 1850. Thos. Price. 1 do 30 00 30 00 do do Assistant do Aug, 1866. April, 1850. John Watson 1 do 26 00 26 00 do Assistant do Aug, 1866. April, 1855. John Watson 1 do 26 00 26 00 do Assistant do Aug, 1866. April, 1855. John Watson 1 do 26 00 26 00 do Assistant do Aug, 1866. April, 1855. John Watson 1 do 26 00 26 00 do Assistant do Aug, 1866. April, 1855. John Watson 1 do 26 00 26 00 26 00 do Assistant do Aug, 1866. April, 1855. John Watson 1 do 26 00 26 00 26 00 do Assistant do Aug, 1866. April, 1855. Thos. Price 1 do 26 00 26 00 26 00 do Assistant do Sept., 1854. John McDonald 18 do 1 00 18 00 do Assistant do Sept., 1864. John Gearon 1 do 26 00 26 00 26 00 do Assistant do Aug, 1856. James Waters 1 do 26 00 26 00 26 00 do Assistant do Aug, 1863. James Waters 1 do 26 00 26 00 26 00 do Assistant do Aug, 1863. James Waters 1 do 26 00 26 00 26 00 do Assistant do Aug, 1863. James Waters 1 do 26 00 26 00 26 00 do Assistant do Aug, 1863. James Waters 1 do 26 00 26 00 26 00 do Assistant do Aug, 1863. James Waters 1 do 26 00 26 00 26 00 do Assistant do Aug, 1863. James Edmunds 1 do 26 00 26 00 26 00 do Assistant do July, 1868. James Edmunds 1 do 26 00 26 00 26 00 do Assistant do Aug, 1868. James Foster 1 do 26 00 26 00 26 00 do Assistant do Aug, 1868. James Foster 1 do 26 00 26 00 26 00 26 00 do Assistant do Aug, 1868. James Foster 1 do 26 00 26 00 26 00 26 00 26 00	Capacity.	When Employed.	Names.	Time.	Rate.	Amount.
475 00	Junction and Marshville. Foreman and charge of water at Allanburgh. Lock Foreman, Allanburgh do Assistant do do Assistant do do do do do do do do do Lock Foreman, Pt. Robinson. do Assistant do Attending Bridge, Junction do Assistant do do Assistant do do Assistant do do Foreman, Hursts do Assistant do do Foreman, Allanburgh do Assistant do do Foreman, Pt. Robinson do Assistant do do Foreman, Pt. Robinson do Assistant do do Foreman, Pt. Robinson do Assistant do do Foreman, Quaker do Assistant do do Foreman, Allanburgh do Assistant do do Foreman, Auguster do Assistant do do Foreman, Auguster do Assistant do do Foreman, Burgess do Assistant do do Foreman, Aqueduct	Welland Canal Co. April, 1861 Sept., 1865 Aug., 1866 April, 1850 July, 1851 April, 1851 April, 1851 May, 1866 Aug., 1866 April, 1854 do 1853 Nov., 1854 July, 1856 Sept., 1854 July, 1859 do 1865 April, 1856 April, 1856 Sept., 1854 July, 1859 do 1865 April, 1856 April, 1856 April, 1856 July, 1859 do 1865 April, 1856 July, 1866 July, 1866	Henry Higgins John Bruce. Wm. Upper. Daniel O'Leary Aaron Higgins. Wm. Higgins. I. Radcliffe Jas. McCoppen John Watson. George Hannah Chas. Hannah John O'Neil. Thos. Price John McDonald John Gearon James Waters Wm Leary George Thomson James Walsh Nelson Higgins Bartholomew Brennan Hugh Quinlin James Edmunds. James Foster.	1 do 1 do	75 00 30 00 30 00 30 00 30 00 30 00 30 00 26 00 26 00 1 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00	30 QO 30 00 30 00 30 00 30 00 30 00 30 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 4, during the month of August, 1869, to Port Colboine Establishment, Harbor Master, &c., Registrar of Water Lock and Bridge Foreman, from Junction to Colborne, chargeable to Maintenance.

Capacity.	Whe n Employed	Names.	Time.	Rate.	Amount.
do do do do do Labor on banks, &c Attending ferry scow Bridge tender, stone bridge	do 1849 Aug., 1863 May, 1856 April, 1851 Aug., 1854 do 1863 June. 1869	John McGillivray John Sweeney John Hinchy Patrick Fahey Michael Madden Edward Hanley	1 do 1 do 1 do 26 days 1 month	34 00	\$ cts. 50 00 34 00 34 00 34 00 34 00 26 00 26 00 26 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 5, during the month of August, 1869, to Port Maitland Establishment, Foreman, Registrar of Water, &c., Lock, from Maitland to Dunnville, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Foreman in charge of water at Dunnville	W. C. Co. June, 1856 W. C. Co. April, 1861 Aug., 1869 June, 1851 Aug., 1869	Robt Morrison Thos. Connor Patrick Cummings Geo. Harris Chas. Thrush Lra Bessey	1 do 1 do 1 do 29 days	30 00 26 00 26 00 1 00	\$ cts. 50 00 30 00 30 00 26 00 26 00 29 00 11 25 4 00 206 25

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 6, during the month of August, 1869, to Lock Laborers' Establishment, Lock and Bridge Assistants, from Dalhousie to Thorold, chargeable to Maintenance.

Lock and bridge assistant, No. 1 Aug., 1864 Andrew Hamilton	Capacity.	When Employed	Names.	Time.	Rate.	Amount.
904 00	do do do 2 do do do 2 do do do 3 do do do 3 do do do 4 do do do 6 do do 6 do do 6 do do 6 do do 6 do do 10 do do 10 do do 12 do do do 12 do do do 15 do do do 15 do do do 16 do do 17 do do 20 do do 20 do do 21 do do 22 do do 23 do do 24 do St. Catharines	Nov., 1854 April, 1853 Nov., 1854 do 1854 do 1854 do 1855 do 1855 Aug., 1867 Mar., 1868 May, 1868 Sept., 1868 Oct., 1862 do 1855 June, 1853 July, 1852 do 1856 Aug., 1854 Oct., 1854 Dec., 1854 Oct., 1854	John Howe. Walter Weaver. Jas. Howe. Arthur Case. John Turnbull Wm. Hare. Hugh Hazen. Robt. Boyle Horton Plumsted. Arthur Bradley. Wm. Wilson. Casper Bradley. Martin Nestor. Alex. Winslow Henry Hair James Delaney Robt. Gibson. Frank Weaver. John Armstrong James Nordill Robert Bradley. James McAuley. Wm. Burley. Stephen Cane. Austin Moran. Patrick Friel. Chas. Kearns. Dennis Daley.	1 do 1 do	34 00 34 00 30 00	34 00 34 00 30 00 30 00 34 00 30

Accounts Chargeable to Welland Canal Maintenance.

Date.	Nature of Work.	\$	cts.	,	₿ (cts.
1869.	DEPARTMENT OF PUBLIC WORKS.					
July August	0 do lubrication oil at 75c	6 25 6 0	60 75 60 00 18 50		F0.	an
July 31	To John Fitzgerald— Advertising for tenders (building pier at Port Dalhousie), 40 lines, first insertion, at 8c	[3	20 20		59	
Aug. 16	To St. Catharines and Welland Canal Gas Company— For lighting the Welland Canal with gas from opening of navigation to date, at \$5,512 per annum, per Contract No. 3,229	2,756	00	2.7	14	
do 6 do 11 do 27 do 27 do 27	1 ream hand made paper	8 2 1	60 50 00 50 15	,	12	
•				2,8	36	78

PAY LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 1, during the month of September, 1869, to Office Establishment, Paymaster, Clerk, &c., chargeable to Maintenance.

Capacity.	When employed.	Names.	Time.	Rate.	Amount.
Paymaster and Clerk	Mar., 1842 April, 1852	Thomas Adams	1 month 1 do	\$ cts. 120 00 12 00	\$ cts. 120 00 12 00 132 00

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 2, during the month of September, 1809, to St. Catharines Establishment, Harbor Master, Head Carpenter, Lock and Bridge Tenders, from Dalhousie to Thorold, chargeable to Maintenance.

Capacity.	When employed.	Names.	Time.	Rate.	Amount.
Harbor Master and Assistant				\$ cts.	\$ cts.
Collector		J. P. Boomer	1 month	93 75	93 75
Head Carpenter	April, 1843	Richard Collier	1 do	75 00	75 00
Lock and Bridge Master, No. 1	Sept., 1853	James Woodall	1 do	34 00	34 00
do Assistant do 1	July, 1856	Thomas Barrett	1 do	34 00	34 00
	Welland				01 00
	Canal Co	William Chace	1 do	30 00	30 00
do Assistant do 2	May, 1860	John Naster	1 do	30 00	30 00
do Master do 3	Sept., 1845	William Walker	1 do	30 00	30 00
do and Bridge Master do 4	Welland				
_		James Malpass		34 00	34 00
		Frank Meighan	1 do	30 00	30 00
		Michael Driscoll		30 00	30 00
do do do 7	Mar., 1865	James Bradley	1 do	30 00	30 00
do do do 8	April, 1855	Daniel McCarthy	1 do	30 00	30 00
		Edward E. Boyle		30 00	30 00
		Bart. Clarke		30 00	30 00
		John Reilly		30 00]	30 00
		James Cougan		30 00	30 00
		Thos. Flynn		30 00	30 00
		Geo. A. Dailey		30 00	30 00
		Michael Moran		34 00	34 00
		Wm. Cochrane		30 00	30 00
do do do 17	do 1847	Wm. Cavers	1 do	30 00	30 00
	June, 1853	John Strong	1 do	30 00	30 00
do do do 19		James McCabe		30 00	30 00
do do do 20	do 1845	William Williams	1 do	30 00	30 00
do do do 21		Andrew Taggart		30 00	30 00
do do do 22		James Phillips	1 do	30 00	30 00
do do do 23		Thos. Turner	1 do	3 0 00	30 00
do and Bridge Master do 24	Dec., 1863	Wm. Fagun	1 do	30 00	30 00
do Master do 25	April, 1853	Jas. Flewallen	1 do	30 00	30 00
Guard Lock Tender, Thorold	do 1861	Ben. McMahon	1 do	30 00	30 00
dodo Assistant	do 1861	Rufus Swazzie	î do	30 00	30 00
Bridge Tender, Lock No. 2	Sept., 1856	George Howe	1 do	26 00	26 00
do St. Catherines	April, 1850	John McCann	1 do	2 6 00	26 00 ;
					1,132 75

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 3, during the month of September, 1869, to Port Robinson Establishment, Carpen'ers on Repairs, Regulating 9 Water Lock and Bridge Tenders, from Thoroid to Junction, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do do Lock master, Port Robinson do aqueduct Attending 21st junction do assistant Bridge tender, Hurst's do Assistant do Marlatt's do Assistant do Allanburgh. do assistant do Port Robinson do Quaker do Burgess do Burgess do Burgess do assistant	April, 1861 W. Canal Co	Henry Higgins John Bruce Wm. Upper Dan. O'Leary Aaron Higgins Wm. Higgins J. C. Radclife Jas. McCoppen John Watson George Hannah	1 do 1 do	\$ cts. 75 00 30 00 30 00 30 00 30 00 30 00 26 00	\$ cts. 75 00 30 00 30 00 30 00 30 00 30 00 30 00 26 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 4, during the month of September, 1869, to Port Colborne Establishment, Harbor Master, Carpenter, Regulating Water Lock and Bridge Tenders from Junction to Colborne, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do do do do Laborer, attendant bridge— Stone Bridge Attending ferry scow Bridge Tender, Stone Bridge	April, 1846 Aug., 1863 May, 1856 April, 1851 Aug., 1854 May, 1863	John McGillivray	1 do 1 do 1 do 1 do 26 days 1 month	34 00 34 00 34 00 34 00 1 00 34 00	\$ cts. 50 00 34 00 34 00 34 00 34 00 34 00 34 00 26 00 26 00 272 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 5, during the mouth of September, 1869, to Port Maitland Establishment, Foreman in charge of Water Lock and Bridge Tenders from Maitland to Dunnville, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Foreman and in charge of water at Dunnville	Welland Canal Co June, 1856 Welland Canal Co June, 1863 April, 1866 June, 1851 Sept., 1859 do 1859	Frank Ramsey. Robt. Morrison. Thomas Connor Pat. Cummings George Harris Charles Thrush James Thrush Robt. Morrison, jr	1 do 1 do 1 do 28½ days 8 do 3 do	\$ cts. 50 00 30 00 30 00 26 00 1 00 1 00 1 00 1 25	\$ cts. 50 00 30 00 30 00 26 00 28 50 8 00 3 00 8 75 210 25

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 6, during the month of September, 1869, to Lock Laborers' Establishment, Lock and Bridge Assistants, from Dalhousie to Thorold, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
				\$ cts.	\$ cts.
Lock and bridge master, No. 1	Aug., 1864	Andrew Hamilton	1 month	34 00	34 00
do do do 1	Nov., 1854	John Howe	1 do	34 00	34 00
Lock master, No. 2				30 00	30 00
do 2	Aug., 1854	James Howe	1 do	30 00	30 00
do 3	April, 1854	Arthur Carroll	1 do	30 00	30 00
Lock and bridge master, No. 4				34 00	34 00
Lock master, No. 5		William Hare		30 00	30 00
do 6		Hugh Hagen		30 00	30 00
do 7		Robt. Boyle		30 00	30 00
do 8	Aug., 1867	Horton Plumsted	1 do	30 00	30 00
		Arthur Bradley	1 do	30 00	30 00
do 10	do 1867	William Wilson	1 do	30 00	30 00
do 11	Mch., 1868	Casper Bradley	1 do	30 00	30 00
		Martin Nestor	1 do	30 00	30 00
do 13	do 1868	Alex'r Winslow	1 do	30 00	30 00
do 14	Oct., 1867	Henry Hair	1 do	3 0 00	30 00
Lock and bridge assistant, No. 15.	Sept., 1856	James Delaney	1 do	34 00	34 00
Lock assistant, No. 16	Mch., 1868	Robt. Gibson	1 do	30 00	30 00
do 17	April, 1862	Frank Weaver	1 do	30 00	30 00
do 18	Oct., 1855	John Armstrong	1 do	30 00	30 00
do 19	June. 1853	James Madill	1 do	30 00	30 00
do 20	July, 1862	Robt. Bradley	1 do	3 0 00	30 00
do 21	l do 1856	Jas. McAuley	1 do	30 00	30 00
do 22	Aug., 1854	Wm. Burlay	1 do	30 00	30 00
do 23	Oct., 1854	Stephen Kane	1 do	30 0 0	30 00
Lock and bridge assistant, No. 24.	Dec., 1863	Austin Moran	1 do	30 00	30 00
do do do 25.	April, 1866	Pat. Friel	1 do	30 00	30 00
Bridge tender, Lock No. 2	June, 1863	Chas. Kearnes	1 do	26 00	26 00
		Dennis Daley		26 00	26 00
do Keefer's	Oct., 1863	Jno. McNamara	1 do	26 00	26 00
					904 00

Accounts Chargeable to Welland Canal Maintenance.

Date.	Nature of Work.	\$	cts.	\$	cts.
1869.					
Sout	To Wm. J. & J. McCalla—				
Sept	64 gallons coal oil at 40c	25	60 75		
	17 do lubricating oil at 75c	14	44		
	8 doz. lamp wicks at 18c		50		
	1 do chimneys	ī	00		
	1 globe lamp			42	29
_	To John Fitzgerald—		- 1		
Aug. 26	Advertising for tenders, pier at Pt. Maitland and Dunnville				
	Dam, 1st insertion, 40 lines, at 8c	_	20		
	8 subsequent insertions at 2c	6	40	^	ظه
	mains Catherine Beat Office			9	60
	To St. Catharines Post Office—	,	55		
	12, 10, 5, 30, 8, 21, 35, 28, 6	1	12		
	3, 6, 20, 6, 10, 6, 15, 6, 8, 6, 10	3	40		
	Stamps. \$1: 26. 28. 45. 18. 16. 10. 28. 6.	2	77		
	21. 10. 9. 18. 51. \$1.50 : 20. 96. 16. 33. 10	4	34		
	30, 16, 20, Stamps, \$3.00; 10, 10, 24, 20	. 4	30		
	18, 32, 22, 28, 16, 5, 6, 10, 15, 6	1	58		
	Box to 30th September		50		
				19	56
Feb. 15	To Wm. S. Copeland & Co-	. ,	25		
db 16	1 bottle ink, \$1; 22 doz. rubber bands, \$1.25	3	75		
Aug.	100 lerge cost envelopes	2	00		
do 7	1 box pens. \$1.50: red tane. 38c.	· 1	88		
do 7	100 large cast envelopes		54		4,
		<u></u>		10	38
		1		gi	83

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 1, during the month of October, 1869, to Office Establishment, Pay-Sheet, &c., Chargeab e to Maintenance.

Capacity.	When Employed.	Names.	Time.	Rate.	Amount.
Paymaster and Clerk	March, 1842 April, 1852	Thos. Adams	1 month 1 do	\$ cts. 120 00 12 9 0	\$ cts. 120 00 12 00 132 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 2, during the month of October, 1869, to St. Catharines Establishment, Harbor Master, Head Carpenter, Lock and Bridge Tenders, from Dalhousie to Thorold, Chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Lock and Bridge Master, Lock No. 1 do	Jan., 1858 Apr., 1843 Sept., 1853 July, 1856 W. C. Co. Mar., 1860 Sept., 1843 W. C. Co. Apr., 1855 July, 1854 Mar., 1865 Sept., 1843 do 1856 Apr., 1853 Jan., 1864 July, 1864 July, 1864 do 1847 do 1847 do 1847 do 1848 do 1847 do 1854 do 1854 Sept., 1863 Apr., 1863 Apr., 1863 Apr., 1864 Sept., 1856	Richard Collier. James Woodall. Thomas Barrett. Wm. Chace. John Nestor. Wm. Walker. Jas. Malpass. Frank Meaghar. Mich. Driscoll. Jas. Bradley. Dan. McCarthy. Ed. Boyle. Bart. Clarke. John Reilly. Jas. Congan. Thos. Flynn. Geo. A. Darby. Mich. Moran. Wm. Cochrane. Wm. Cavers. John Strong. Jas. McCabe. Wm. Williams. Andrew Taggart Jas. Philips. Thos. Turner. Wm. Fegan. Jas. Flewallen. Ben. McMahon Rufus Swazze.	1 do 1 do	75 00 34 00 34 00 30 00	\$ cts 93 75 75 75 75 75 75 75 75 75 75 75 75 75 75 75 7
					1,132 75

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 3, during the month of October, 1869, to Port Robinson Establishment, Carpenter on Repairs, Regulating Water, Lock and Bridge Tenders, from Thorold to Junction, Chargeable to Maintenance.

Capacity. When Employed Na	mes. Time.	Rate.	Amoun	t.
Carpenter on Repairs, Thorold, Junction and Marshville. Foreman in charge of water at Allanburgh. Lock Master, Allanburgh	ns.	\$ cts. 75 00 30 00 30 00 30 00 30 00 30 00 30 00 26 00	\$ cf 75 0 30 00 30 00 30 00 30 00 30 00 30 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00	

PAY-LIST, in duplicate, of Persons employed on the Welland Canal, Sheet No. 1, Division No. 4, during the month of October, 1869, at Port Colborne Establishment, Harbor Master, Carpenter, Regulating Water, Lock and Bridge Tenders from Junction to Colborne, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do do do do Labor on banks and attending stone bridge Attending ferry scow Bridge tender, stone bridge	Apr., 1849 Aug., 1863 May, 1856 Apr., 1851 Aug., 1854 May, 1863 June, 1869	John McGillvray	1 do 1 do 1 do 26 days 1 month	34 00 34 00 34 00 34 00 1 00 34 90	\$ cts. 50 00 34 00 34 00 34 00 34 00 34 00 34 00 26 00
					272 00

PAY-LIST, in duplicate, of Persons employed on the Welland Canal, Sheet No. 1.
Division No. 5, during the month of October, 1869, at Port Maitland Establishment, Foreman, Regulating Water, &c., Lock and Bridge Tenders, from Maitland to Dunnville, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Laborer on banks. &c	W. C. Co. June, 1856 W. C. Co. Apr., 1861 Aug. 1859 June, 1851 Oct., 1869 do	Robt. Morrison	1 do 1 do 1 do 1 do 28 days 25 do 25 do	30 00 26 00 26 00 1 00 1 00	\$ cts. 50 00 30 00 30 00 26 00 28 00 25 00 25 25 6 50 15 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 6, during the month of October, 1869, to Lock Laborers' Establishment, Lock and Bridge Assistants, from Dalhousie to Thorold, chargeable to Maintenance.

	1	I			
Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do No. 2	Nov., 1854 April, 1852 Aug., 1854 do 1850 do 1862 do 1854 do 1854 Aug., 1867 April, 1868 Sept., 1863 do 1866 do 1866 Mar., 1868 April, 1862 Oct., 1855 July, 1862 do 1856 Aug., 1854 Oct., 1854 Dec., 1854 Dec., 1868 April, 1868 Sept., 1868 Sept., 1868 Sept., 1868 Sept., 1868 Sept., 1868 April, 1869 July, 1862 do 1856 Sept., 1854 Oct., 1854 Oct., 1854 Sept., 1868 Sept., 1868	John Howe Walter Weaver. James Howe Arthur Carl. John Turnbull Wm. Hare. Hugh Higgins. Robert Boyle. Hortens Plumsted Arthur Bradley William Wilson Casper Bradley Martin Nestor. Alex. Winslow Henry Hair. James Delaney Robt. Gibson. Frank Weaver. John Armstrong. James Madill Robt. Bradley. James McAuley Wm. Burley. Stephen Kane Austin Moran Patrick Friel Charles Kearnes Dennis Baley	1 do 1 do	\$ cts. 34 00 34 00 30 00	\$ cts. 34 00 34 00 30 00
do Keefer's	Oct., 1863	John McNamara	1 do	26 00	904 00

Accounts chargeable to Welland Canal-Maintenance.

D	ate.	DEPARTMENT OF PUBLIC WORKS.	\$	cts.	\$	cts.
July Aug. do do	5 23 26	8 cts.; 2nd, at 2 cts.; 37 lnes	3 2 4 12 5	70 50 10 00 50	34	1 30
Aug.	5 26	To Advertising east pier, Port Dalhousie— 75 lines, 1st time, at 8 cts	1	3 00 50 48 12		10

PAY-LIST in duplicate of Persons employed on the Welland Canal. Sheet No. 1, Division No. 1, during the month of November, 1869, to Office Establishment, Paymaster, Clerk, &c., chargeable to Maintenance.

Capacity. When Employed Names. Time. Rate. Amount. Paymaster and clerk						
Paymaster and clerk	Capacity.		Names.	Time.	Rate.	Amount.
	Paymaster and clerk	Mar., 1842 April, 1852	Thomas AdamsWm. Cook	I month 1 do	120 00	12 00

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 2, during the month of November, 1869, to St. Catharines Establishment Harbor Master, Head Carpenter, Lock and Bridge Tenders, from Dalhousie to Thorold, chargeable to Maintenance.

Capacity.		When Employed	Names.	Time.	Rate.	Amount.
Harbor master, &c , Dal Head carpenter Lock master and bridge do assistant do do master do d	5 6 7 9 11 12 15 10 11 12 15 16 17	Employed Jan., 1858 April, 1843 Sept., 1853 July, 1856 W. Canal Co. May, 1860 Sept., 1845 W. Canal Co. April, 1855 April, 1855 April, 1855 April, 1855 July, 1854 do 1847 July, 1866 July, 1866 July, 1849 Aug., 1845 do 1847 do 1847 do 1847 do 1845 do 1846	J. P. Boomer Richard Collier	1 month 1 do	Rate. \$ cts. 93 75 75 00 34 00 34 00 30 00	\$ cts. 93 75 75 00 34 00 34 00 30 00
do do do do do Guard lock tender, The do assistant o Bridge tender, Lock No do St. Cath	24 25 prold lo arines	Dec., 1863 April, 1852 do 1861 do 1861 Sept., 1856 April, 1850	Wm. Fegan	1 do 1 do 1 do 1 do 1 do	30 00 30 00 30 00 30 00 26 00 26 00 26 00	30 00 30 60 30 00 30 00 26 00 26 00 26 00
100101 5		1000				1,132 75

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No 3, during the month of November, 1869, to Port Robinson Establishment, Carpenter on Repairs, Regulating Water Lock and Bridge Tenders from Thorold to Junction, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do do do do do do do Aqueduct do Assistant do Aqueduct do Aqueduct do Assistant do Aqueduct do Assistant do Aqueduct do Assistant do Aqueduct do Assistant do Aqueduct do A	April, 1891 W. C. Co. April, 1881 Sept, 1865 Aug., 1866 April, 1850 Dec., 1862 April, 1850 Dec., 1862 April, 1851 do 1853 Nov, 1854 Feb., 1864 April, 1866 April, 1868 April, 1868 April, 1868 April, 1868 Feb., 1864 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868	Henry Higgins John Bruce Wm. Upper Daniel O'Leary Aaron Higgins Wm. Higgins I. Radcliffe James McCoppen John Watson George Hannah	1 do 1 do	75 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 26	\$ cts. 75 00 30 00 30 00 30 00 30 00 30 00 30 00 26 00
•	İ	ł	ł	1	

Par-List in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 4, during the month of November, 1869, to Port Colborne Establishment, Harbor Master, &c., Carpenter, Regulating Water, Lock and Bridge Tenders from Junction to Colborne, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do do do do do do Laborer on banks, &c Attending ferry and scow Bridge tender, Stone Bridge	Aug., 1863 May, 1856 Apr., 1851 Aug., 1854 May, 1863 June, 1869	John Hinchey	1 do 1 do 1 do 25½ days 1 month. 1 do	\$ cts. 50 00 34 00 34 00 34 00 1 00 34 00 26 00	\$ cts. 50 00 34 00 34 00 34 00 34 00 25 50 34 00 26 00 26 00

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 5, during the month of November, 1869, to Port Maitland Establishment, Foreman and in charge of Water Lock and Bridge Tender from Maitland to Dunnville, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amoun	t.
Attending 2 bridges, Bridge Creek	Go June, 1856 W. Canal Co June, 1863 Apr., 1866 June, 1851 Nov., 1869 do do	Robert Morrison Thomas Connor Patrick Cummings George Harris	1 do 1 do 1 do 281 days 241 do 51 do 52 do	\$ cts. 50 00 30 00 30 00 26 00 1 00 1 00 2 50 1 00	50 30 30 26 26 28 24	00 00 00 50 50 50 75

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1,
Division No. 6, during the month of November, 1869, to Lock Laborers' Establishment, Lock and Bridge Assistants, from Dalhousie to Thorold, chargeable to
Maintenance.

						Ī		<u> </u>				
Саря	icity.	i	Wh Emplo		Names.		Time		Rate		Amour	ıt.
						-		_		cts.		cts.
Lock and bridge	assistant, l	No. 1	Aug.,	1864	Andrew Hamilton	. 1	montl	ı	34	00		00
do	ďoʻ	1	Nov.,	1854	John Howe	1	do		34		34	00
do	do	2	A pril,	1852	Walter Weaver	1	dо		30		30	00
do	do	2	Aug.,	1854	James Howe	1	đо	••••	30	00	30	OO
do	do	3	April,	1854	Arthur Carroll	1	do		30		30	00
do	do	4	do ′	1850	John Turnbull	1	do		34	00	34	00
do	do	5	do	1862	Wm. Hare	. 1	do		30		30	00
do	do	6		1854	Hugh Hagan	1	do		30	00	30	00
do	do	7		1854	Robt. Boyle	1	d o		30	00	30	00
do	do	8	Aug.,	1867	Horton Plumsted	1	do		30	00		00
do	do	9	April		Arthur Bradley		do	·		00	30	00
∙do	do		∵do		Wm. Wilson		do		30	00	30	00
do	ďО	11	Mar.,	1868	Casper Bradley	1	do		30	00	30	00
do	do	12	Sept.	1863	Martin Nestor	. 1	do		30	00	30	00
đo	do	13	dô	1868	Alex. Winslow	1	do		30	00	30	
do	do	14	Oct.,	1867	Henry Hair	1	do		30	00	30	00
do	do	15	Sept.	1856	James Delaney	1	do		34	00		00
do	do	16	Mar	1868	Robt. Gibson	. 11	do		30			00
do	do	17	April	.1862	Frank Weaver	1	do		30			00
do	do	18	Oct.	1855	John Armstrong	lī	do			00		00
đo	do	19	June.	1853	Jas. Madill	.lī	do		30	00		00
đo	do	20	July.	1862	Robt. Bradley	Jī	do		30	00		00
đo	do	21	do	1856	Jas. McAuley	lī	đố			00		00
đo	do			1854	Wm. Burley	lī	đo		. 30	00		00
ďο	do	23	Oct.	1854	Stephen Kane	lî	ďő			00	39	
do	do	24	Dec.	1863	Austin Moran	Ιī	do			00		00
do	đo	25	April	. 1866	Patk. Friel	Ιī	do			00		00
		2	June.	1863	Chas. Kearns	Ιī	do			00		00
do	St. Cath	arines	Sept.	1859	Dennis Daley	.lī	do	•••		00		00
do	Keefer's.	• • • • • • • • • • • • • • • • • • • •	Oct.,	1863	Jno. McNamara	. įi	ďo	•••		00		00
											904	00

PAY LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 7, during the month of November, 1869, to Oils, Wood, &c., furnished, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Oils farnished	Nov., 1869 do 1869	Wm. J. & J. McCalla. Elkana Rogers		\$ cts.	\$ cts. 86 45 56 90 142 45

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 1, during the month of December, 1869, to Office Establishment, Paymaster, Clerk, &c., chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Paymaster and Clerk	Mar., 1842 April, 1852	Thos. Adams	1 month 1 do	\$ cts. 120 00 12 00	\$ cts. 120 00 12 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 2, during the mouth of December, 1869, to St. Catharines Establishment, Harbor Master, &c., Head Carpenter, Lock and Bridge Tenders, from Dalhousie to Thorold, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do do 7	April, 1843 do 1853 July, 1856 Welland Canal Co do May, 1860 do 1860 Sept., 1845 Welland Canal Co do April, 1853 July, 1854 Mar., 1865	Richard Collier	1 do 1 do 2 do 2 do 3 do 3 days 4 month 1 do 1 do 1 do 1 do 1 do 2 do 3 do 4 month 5 do 6 do	\$ cts. 93 75 75 00 34 00 30 00 34 00 30 00 30 00 1 00 30 00 1 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00	\$ cts. 93 75 75 00 17 00 17 00 18 00 15 00 15 00 15 00 15 00 15 00
do do 9 do do 10 do do 11 do do 12 do do 13 do do 14 Lock and Bridge Tender, do 15 do 16 do do 17 do do 18 do do 19 do do 20 do do 21 do do 22 do do 22	Sept., 1853 do 1856 April, 1853 May, 1855 Jan., 1864 July, 1866 June, 1843 do 1847 June, 1853 do 1847 do 1845 do 1854 do 1863	Wm. Cochrane Wm. Cavers. John Strong. Jas. McCabe. Wm. Williams. Andrew Taggart. Jas. Philips. Thos. Turner	do do do do do do do do do do do do do do	30 00 30 00	15 00 15 00 16 00 15 00 15 00 15 00 17 00 15 00 15 00 15 00 15 00 15 00 15 00 15 00 15 00
Lock Master	do 1852 do 1861 do 1861 Sept., 1856 do 1856 April, 1850	Go	do do do do do days month	30 00 30 00 30 00 30 00 26 00 1 00 26 00 26 00	30 00 15 00 15 00 14 50 13 00 13 00 701 25

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 3, during the month of December, 1869, to Port Robinson Establishment, Carpenter on Repairs, Regulating Water, Lock and Bridge Tenders, from Thorold to Junction, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Lock Foreman, Port Robinson do Aqueduct	April, 1861 We 11 a nd Canal Co April, 1861 Sept., 1865 Aug., 1866 April, 1850 July, 1851 April, 1850 July, 1861 April, 1850 Aug., 1866 April, 1850 Aug., 1866 April, 1846 Sept., 1854 July, 1859 April, 1866 Sept., 1854 July, 1859 April, 1866 April, 1866 April, 1866 April, 1866 April, 1866 April, 1866 April, 1866 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868 April, 1868	Henry Higgins	1 do	\$ cts. 75 00 30 00 30 00 30 00 30 00 30 00 30 00 26 00	\$ cts. 75 90 30 00 15 00 15 00 15 00 15 00 13 00

Pay-List in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 4, during the month of December, 1869, to Port Colborne Establishment, Harbor Master, Overseer of Works, Regulating Water, Lock and Bridge Tenders, from Junction to Colborne, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do do do Laborer on banks, &c Attending ferry scow Bridge tender stone bridge	do 1849 Aug., 1863 May, 1856 Apr., 1851 Aug., 1854 do 1863 June, 1869	J. McGillivray	do do do do do do do do do do do do	34 00 34 00 34 00 1 00 34 00	\$ cts. 50 60 32 00 17 00 17 00 17 00 9 00 34 00 13 00 13 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 5, during the month of December, 1869, to Port Maitland Establishment, Foreman, Regulating Water and Bridge Tender, from Port Maitland to Dunnville, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Foreman in charge of water at Dunnville Guard lock foreman and checking lock passes	W. C. Co. June, 1856 W. C. Co. Apr., 1861 do 1866 June, 1851 Dec., 1869 do	Robt. Morrison	do do days month day month day do month day do month day 7 do 1 do	\$ cts. 50 00 30 00 1 00 30 00 1 00 30 00 1 00 30 00 1 00 30 00 1 00 30 1 00 30 1 00 30 1 00 30 1 00 30 1 50	\$ cts 50 00 25 00 16 00 14 00 14 00 27 00 7 00 2 50 37 50

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 6, during the month of December, 1869, to Lock L. borers' Establishment, Lock and Bridge Assistants, from Dalhousie to Thorold, chargeable to Maintenance.

Сар	ecity.		Whe Emplo		· Names.	Time.	Rate.	Amount.
T						, ,,	\$ cts.	\$ cts.
		0. 1	Aug.,	1864	Andrew Hamilton	1 month do	34 00	17 00
do	do		•		John Howe	\$ GO	34 00	17 00
do	do	2	April,	1852	Walter Weaver,	2 ao	30 00 1 00	16 00
			_ ′		(James Horre	1 44.5		}
do	do	2	Aug.,	1854	{ James Howe	3 days	30 00 1 00	18 00
					(Anthun Con)	month.	30 00	}
do	do	3	April,	1854	Labor	1 day	1 00	16 00
do	do	4	do	1850	Jno. Turnbull	month	34 00	17.00
do	do	5	do	1862	Wm. Hare	do	30 00	17 00 15 00
do	do	6	do	1852	Hugh Hughen	1 do	30 00	15 00
do	do	7	do	1852	Robt. Boyle	do do do	30 00	15 00
do	do		Ang.	1867	Horton Plumsted	₹ do	30 00	15 00
do	do				Arthur Bradley		30 00	15 00 15 00
do	do	10	go,	1867	Wm. Wilson	do	30 00	15 00
do	do		Mich.	1868	Casper Bradley	4 do	30 00	15 00
do	do	12	Sept.	1863	Martin Nestor	do	30 00	15 00
do	do	13	do	1868	Alex'r Winslow	do	30 00	15 00
do	do	14			Henry Hair		30 00	15 00
do	do	15	do	1856	Jas. Delaney	1 do	34 00	17 00
do	do	16	Mch.,	1868	Robt. Gibson	å do	30 00	15 00
do	do	17	April,	1862	Frank Weaver	1 do	30 00	15 00
do	do .	18	Oct.,	1855	John Armstrong	å do	30 00	15 00
do	d o	19	June,	1853	Jas. Madill	1 do	30 0 0	15 00
do	do	20	July,	1862	Robt. Bradley	🥻 do	30 00	15 00
do	do	21	do :	1856	Jas. McAuley	l	30 0 0	15 00
do	do	22	Aug.,	185 4	Wm. Burley	l l do∣	30 00	15 00.
do	do	23	Oct.,	1854	Stephen Kane	1 do	30 00	15 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c.-Continued.

(Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do	do 25 er, Lock No. 2 St. Catharines	April, 1866 June, 1863 Sept., 1859	Austin Moran Pat'k Friel Chas. Kearns Labor. Dennis Daley Jno. McNamara	do do days	30 00	15 00 15 00 14 50 13 00 13 00
:						458 50

Accounts chargeable to Welland Canal, Maintenance.

Date.		\$ cts.	\$ ets.
1869. Sept. 30 do 30 do 30 do 30 do 30 do 30 do 30 do 30		3 00 2 28 4 41 3 30 5 30 5 55 2 26 1 66 0 50	28 26
Oct. 1 do 1 Nov. 4 do 12 do 16 Dec. 11 do 29 do 29 do 29	To 2 yards tracing cotton, \$1.50; 3 doz. rubber bands, 25 cts 1 box pens, \$1.50; 3 doz. rubber bands, \$1.50	1 75 3 00 2 50 2 00 1 75 2 00 2 00 1 50 5 00	21 50
July 6 do 21 do 26 Aug. 9 Sept. 9 do 15 do 16 do 27 do 27 Oct. 13 Nov. 23 Dec. 7 do 11 do 22	To Messages to and from Dunnville, 50 cts	2 05 1 46 0 55 1 26 0 84 89 00 30 00 1 12 1 22 1 46	11 09 ⁻
Oot e-	NORRIS & NELSON.		KO 17K
Jul. 27	To 7½ tons soft coal, at \$7		111 60

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 2, during the month of January, 1870, to St. Catharine's Establishment, Harbor Master, Head Carpenter, Overseer of Works, Lock and Bridge Tenders, from Dalhousie to Thorold, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Harbor Master and Assistant Collector	Jan., 1858	J. P. Boomer	1 month	\$ ets 93 75	\$ cts. 93 75
travelling expenses do horse hire to make measurements during last	A pril, 1843 	Richard Collier	1 year	100 00	} 175 00
vear	do	do	1 month	75 00	J
Lock Master regulating water, No. 8 Lock Assistant, No. 8	July, 1856	James Woodall Thomas Barrett	1 do	30 00	30 00
Lock Master regulating water, No. 2,	Welland Canal Co	William Chace	1 month	30 00)
Lock Master, allowance for check- ing Lock Passes last year Lock Assistant, No. 2 Lock Master, No. 3, allowance	do May, 1860	do John Nestor, labor	1 year 6½ days	30 00 1 00	6 50
for making measurements of rafts passing through Canal and checking lock passes	Sept., 1845	William Walker	l year	50 00	50 00
Lock and Bridge Master, No. 4 do do No. 5	(Canal Co.,	James Malpass, labor.	1 day	1 00	1 00
do do No. 6 do do No. 7	July, 1854 May, 1865	Frank Meagher Michael Driscoll James Bradley	******		
do do No. 8 do do No. 9	July, 1854 Sept., 1853	James Bradley Daniel McCarthy Edward Boyle			
Lock Master, No. 11, regulating	do 1856	Bart. Clarke			
water, hydraulic raceLock Master, No. 12	April, 1853 May, 1855	John Rielly James Couglin	1 year	Per year	20 00
do No. 13do No. 14	Jan., 1864 July, 1866	George A. Darby			********
do and Bridge, No. 15 do No. 16	Aug., 1845	Michael Moran William Cochrane Wm. Cavers			
do No. 17 do No. 18	June, 1853	Wm. Cavers		••••••	********
do No. 20	1 do 1845	Wm. Williams			
do No. 21	Sept., 1857	Andrew Taggart James Philips			
do and Bridge, No. 24 do No. 25, regulating	Dec., 1863	Thos. Turner	***************************************	***************************************	***************
water, hydraulic race, from Thorold to St. Catharines Guard Lock Tender, Thorold	April 1952	Jas. Flewallen Ben McMahon	1 month	Per month	30 00
Guard Lock Tender, Thorold do Assistant Bridge Tender, Lock No. 2 do St. Catharines	do 1861 Sept., 1856 April 1850	Rufus Swazzie George Howe, labor John McCann	3 days	1 00	3 90
do Keefer's	Feb., 1863	Samuel Booth	*************************	••••••	
					469 25

Accounts chargeable to Welland Canal, January, 1870, Maintenance.

Date.	Nature of Work.	\$ cts.	\$ cts.
1869. Dec. 1 do 1 do 1		4 40	7 10

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 1, during the month of February, 1870, to Office establishment, Paymaster, Clerk, &c., chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Paymaster and clerk				\$ cts. 120 90 12 00	\$ cts. 120 00 12 00 132 00

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 3, during the month of February, 1870, to Port Robinson Establishment, Carpenter on Repairs, regulating Water Lock, and Bridge Tender from Thorold to Junction, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
parau				\$ cts.	\$ cts.
Carpenter on repairs, Thorold				₩ 005.	φοισε
Junction and Marshville	April, 1861	Thos. R. Secord	1 month	75 00	75 00
Foreman in charge of water at	r ,				
Allanburgh	W.C. Co.	Henry Higgins	1 do	30 00	
Lockmaster Allanhurgh	Anril 1861	John Bruce			
do do	Sept., 1856	Wm. Upper (labor)	11 davs	1 00 1	11 00
Guard lock foreman, Allanburgh.	Aug., 1866	Daniel O'Leary			
do tender do	Anril. 1850	Agron Higgins	l		
do do do do do Lock tender, Port Robinson	July, 1851	Wm. Higgins (labor).	24 days	1 00	24 00
do do do	April, 1850	J. C. Radcliffe			4.00
Lock tender, Port Robinson	Dec., 1862	Jas. McCoppen(labor)	4 days	1 00	4 00
Attending 2 bridges, Junction	Мау, 1856	Geo. Hannan			*******************************
do do do assistant.	Aug., 1866	Charles Hannah	1		***************************************
Bridge tender, Hurst	Aprii, 1840	Thomas Price			
do Marlatts	Nov 1855	John McDonald			
do do assistant	Feb 1864	John Gearon			
do Allanburgh	April 1866	Jas. Waters (labor)	24 days	1 00	24 00
do do assistant.	Sent., 1854	Wm. Leary		1 00	
do Port Robinson	LJuly, 1859	George Thomson	1		
do do assistant.	Aug., 1863	Jas. Walsh	l		
do Onaker	l do 1865	Nelson Higgins		1	
do do assistant	April. 1855	Bart. Brennan	1		
do Burgara	1 do 1849	Hugh Oninlin		1	
do do assistant	Feb., 1866	James Edmonds			
do Aqueduct	Aug., 1868	James Foster	· [
do do assistant	do 1863	James Edmonds James Foster David Tuft	· [
					168 00

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 4, during the month of February, 1870, to Port Colborne Establishment, Harbor Master, &c., Overseer of Works Reg. Water, Lock and Bridge Tender, from Junction to Colborne, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Attending ferry scow	Aug., 1853 May, 1856 April, 1851 Aug., 1854 do 1863	John Sweeney John Hinchey Patrick Fahey Michael Madden Edward Hanlay	•••••		50 00 30 00

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 5, during the mouth of February, 1870, to Port Maitland Establishment, Foreman and in charge of Water Lock and Bridge Tender, from Maitland to Dunnville, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Foreman and in charge of water at Dunnville	W. Cnl. Co June, 1856 W. Cnl Co April, 1866 do 1866 June, 1851	Robt. Morrison Thomas Connor Patrick Cannings George Harris Charles Thrush	17 days 27 days	1 00	

Pay-List in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 6, during the month of February, 1870, to Lock Laborers' Establishment, Lock and Bridge Assistants from Dalhousie to Thorold, Chargeable to Maintenance.

Capacity.	When Employed.	Names.	Time.	Rate.	Amount.
Lock master's assistant, No. 1 do do No. 2 do do No. 2 do do No. 3 Lock and bridge assistant, No 4 do do No. 5 do do No. 6 do do No. 6 do do No. 10 do do No. 11 do do No. 11 do do No. 12 do do No. 12 do do No. 13 do do No. 13 do do No. 13 do do No. 14 do do No. 15 do do No. 15 do do No. 15 do do No. 15 do do No. 15 do do No. 16 do do No. 15 do do No. 15 do do No. 15 do do No. 16 do do No. 17 do do No. 18 do do No. 19 do do No. 20 do do No. 21 do do No. 21 do do No. 22 do do No. 23 do do No. 23 do do No. 23 do do No. 23 do do No. 24 do St. Catharines do St. Catharines	Aug., 186- Nov., 185- April, 185- do 186- do 186- do 186- do 186- do 186- do 186- do 186- Aug., 186- April, 185- do 186- April, 186- Cot., 186- Sept., 186- Sept., 186- Sept., 186- Sept., 186- Sept., 186- April, 186- Oct., 185- July, 185- July, 185- July, 185- Aug., 185- Aug., 185- Dec., 186- April, 186- Oct., 185- April, 186- Jupe., 185- Jupe., 185- July, 186- Jupe., 185- Jupe., 185- Jupe., 185- Jupe., 185- Jupe., 186- April, 186- Jupe., 186- April, 186- Jupe., 186- Jup	Andrew Hamilton John Howe Walter Weaver James Howe Arthur Carl. John Turnbull Wm. Hare Hugh Hag+n Robert Boyle Horton Plumsted Arthur Bradley William Wilson Casper Bradley Martin Nestor Alex. Winslow Henry Hair James Delaney Robert Gibson Frank Weaver John Armstrong Jas. Madill Robert Bradley Wm. Burley Wm. Burley Wm. Burley Stephen Kane Austin Moran Patrick Friel Chas. Kearnes Dennis Daley John Macnamara	19 do 11 days 11 days 114 days 124 days 143 do 143 do 163 days	\$1 per day do \$1 per day do \$1 per day store day do	1 50 17 25 14 00 14 75 21 00
do Keefer's	Oct., 1863	John Macnamara			154 75

Accounts chargeable to Welland Canal, Maintenance, February, 1870.

Date.		\$	cts.	\$ cts.
1869 Dec. 15	St. Catharines and Welland Canal Gas Co. To Supply of gas to Welland Canal since 15th Aug., as per contract	2,750	3 00 0 00	2,856 00

ACCOUNTS chargeable to Welland Canal, Maintenance, March, 1870.

Date.		\$ cts.	\$ cts.
1869.	James Seymour.		
do 14 1870. Mar. 7 do 7	To Printing 100 copies Returns of Accounts, ruled and endorsed one-half	4 00 9 50 6 00 8 00	
do 15 do 15	100 Extension do do	4 00 8 00 2 00	39 50
Feb. 10 do 26 Mar. 2	Red ink, 38c.; Féb. 14, 1 bottle, 25c	0 63 4 00 0 25	6 88
Dec. 30	To 3, 6, 10, 22, 83, 16, 76, 35, 28	2 67 1 92 2 19 1 71 1 39	19 03
	Total		65 41

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 1, during the month of April, 1870, to Office Establishment, Paymaster, Clerk, &c., chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Paymaster and Clerk					\$ cts. 120 00 12 00 132 00

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 2, during the month of April, 1870, to St. Catharines Establishment, Harbor Master, Head Carpenter, Overseer of Works, Lock and Bridge Tenders, from Dalhousie to Thorold, chargeable to Maintenance.

	1 1	i i		
Capacity. Whe		Time. Ra	te.	Amount.
do Master do 2 Wells Cana do Assistant do 2 May, Sept., Wells Cana do Master do 4 Wells Cana April, Cana April, Cana April, Cana April, Cana April, Cana Cana Cana April, Cana Cana Cana April, Cana April, Cana Cana April, April, Cana April, Cana April, Cana April, April, Cana Cana April, Cana April, Cana Cana Cana	843 Richard Collier 853 do 856 Thomas Barrett nd Co Wm. Chace 860 John Nestor 845 William Walker nd Co James Malpass 845 Frank Meagher 854 Daniel Drissoll 853 James Bradley 854 Daniel McCarthy 855 Bart. Clarke 853 John Reilly 855 Jas Conger 864 Thomas Flynn 866 Geo. A. Darley 849 Michael Moran 847 Wm. Cavers 853 John Strong 847 Jas McCabe 845 Wm. Williams 854 Thos. Turner 863 Jas. Philips 854 Thos. Turner 863 Wm. Fegan 854 Dar. McMahon 861 Rufus Swazzie	1 month 9 1 do 7 1 do 3 2 do 3 2 days 1 2 month 3 26½ days 1 2 days 1 27 do 21 do 21 do 21 do 22 do	3 cts. 3 75 5 00 00 00 10 00 1 00 1 00 1 00 1 00	\$ cts. 93 75 75 00 25 00 26 50 12 00 27 00 27 00 27 00 27 00 27 00 25 00 26 75 26 75 26 76 27 00 28 00 29 00 29 00 20 00 20 00 20 00 20 00 20 00 20 00 20 00 20 00 20 00

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 3, during the month of April, 1870, to Port Robinson Establishment, Carpenters on Repairs, Regulating Water Lock and Bridge Tenders, from Thorold to Junction, chargeable to Maintenance.

Carpenter on repairs, Thorold Junction and Marshville Apr., 1861 W. Canal at Allanburgh Co Henry Higgins 1 do 30 00 30 00 Lock Tender, Allanburgh Apr., 1861 John Bruce 11 days 1 00 11 00 11 00 do. Asst. do Apr., 1850 Mainel O'Leary 16 do 10 0 11 00 do. Asst. do Apr., 1850 Mainel O'Leary 16 do 1 00 11 00 do. do. Apr., 1850 Apr., 1850 July, 1851 Jas. McCoppen 14 do 1 00 23 00 do. Apr., 1850 July, 1851 Jas. McCoppen 14 do 1 00 23 00 do. Apr., 1850 Jas. McCoppen 14 do 1 00 21 00 do. Apr., 1851 Another Higgins 23 do 1 00 21 00 do. Apr., 1850 Jas. McCoppen 14 do 1 00 11 00 do. Attending 2 Brs. Junction May, 1856 George Hannah 11 do 1 00 11 00 do. Apr., 1850 Apr., 1866 Chas. Hannah 11 do 1 00 11 00 do. Asst., Hursts do Apr., 1865 John O'Neill 13 do 1 00 13 00 do. Asst., Marlatts Mov., 1854 John McDonald 10 do 1 00 13 50 do. Asst., do Sept., 1854 John Gearon 11 do 1 00 10 00 25 50 do. Asst., do Sept., 1854 John Gearon 11 do 1 00 23 50 do. Asst., do Sept., 1854 William O'Leary 14 do 1 00 23 50 do. Asst., do Sept., 1854 John Gearon 11 do 1 00 25 50 do. Asst., do Apr., 1865 James Waters 25 do 1 00 23 50 do. Asst., do Apr., 1866 James Edmonds 10 do 1 00 10 00 do. Asst., Aqueduct Aug., 1868 David Tuft 10 do 1 00 10 00 do. Asst., Aqueduct Aug., 1868 David Tuft 10 do 1 00 10 00 do. Asst., Aqueduct Aug., 1868 David Tuft 10 do 1 00 10 00 do. Asst., Aqueduct Aug., 1868 David Tuft 10 do 1 00 10 00 do. Asst., Aqueduct Aug., 1868 David Tuft 10 do 10 do 10 do 10 do 10 do 10	Capacity.	When Employed	Names.	Time.	Rate.	Amount.
	Junction and Marshville Foreman in charge of water at Allanburgh Lock Tender, Allanburgh do Asst. do do Asst. do do do do do do do do Asst. do do Asst. do do Asst. do do Asst. do do Asst. do do Asst. do do Asst. do do Asst. do do Asst. do do Asst. do do Asst., Hursts do Asst., Hursts do Asst., Marlatts do Asst., do do Asst., do do Asst., do do Asst., do do Asst., do do Asst., do do Asst., do do Asst., do do Asst., do do Asst., do do Asst., do do Asst., do do Asst., do do Asst., do do Asst., do do Asst., do do Asst., do do Asst., do do Asst., Burgers do Aqueduct	Apr., 1861 W. Canal Co Apr., 1861 Sept., 1865 Aug., 1866 Apr., 1850 July, 1851 Apr., 1850 July, 1861 Apr., 1850 July, 1861 Apr., 1854 Aug., 1866 Apr., 1845 do. 1853 Nov., 1854 Feb., 1864 Apr., 1866 Sept., 1854 July, 1859 Apr., 1866 Sept., 1854 July, 1859 Apr., 1866 Feb., 1864 Apr., 1868	Henry Higgins. John Bruce. William Upper. Daniel O'Leary Aaron Higgins. William Higgins I. Radcliffe. Jas. McCoppen. John Watson. George Hannah. Chas. Hannah. John O'Neill. Thomas Price. John McDonald. John Gearon. James Waters. William O'Leary. George Thomson. James Waters. William O'Leary. George Thomson. James Welch. Nelson Higgins. Bart. Brennan. Hugh Quinlin. James Edmonds. James Foster.	1 do 11 days 11 days 11 do 16 do 23 do 24 do 14 do 10 do 11 do 11 do 11 do 11 do 11 do 125½ do 25½ do 25½ do 25½ do 25½ do 10 do 10 do 10 do	30 00 1 00	75 00 30 00 11 06 11 00 16 00 23 00 26 00 21 00 14 00 11 00 11 00 13 00 13 50 10 00 23 50 24 50 25 50 14 00 23 50 25 50 14 00 21 50 10 00 10 00 10 00 10 00

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1. Division No. 4, during the month of April, 1870, to Port Colborne Establishment, Harbor Master, &c., Overseer of Works Reg. Water, Lock and Bridge Tenders, from Junction to Colborne, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do do do do do Laborer on banks, &c Attending ferry scow Bridge tender, stone bridge	do 1849 Aug., 1863 May, 1856 April, 1851 Aug, 1854 do 1863 June, 1869	John McGillivray { John Sweeney John Hinchey Patrick Fahey Michael Madden Edward Hanly	1 do 2 days 26 do 22 do 21 do 21 do 25 do 10 do	30 00 34 00 1 00 1 00 1 00 1 00 1 00	\$ cts. 50 00 22 00 26 00 22 00 21 00 25 00 10 00 21 00

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 5, during the month of April, 1870, to Port Maitland Establishment, Foreman and in charge of Water, Lock and Bridge, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Foreman and in charge of water at Dunnville	W. Cnl.Co June, 1856 W. Cnl.Co April, 1860 do 1866	Robt. Morrison Thomas Connor Patrick Cummings George Harris	29 days 1 month 13 days 10 do	1 00 1 00	\$ cts. 50 00 29 00 30 00 13 00 10 00 33 50

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 6, during the month of April, 1870, to Lock Laborers' Establishment, Lock Bridge Assistants, from Dalhousie to Thorold, Chargeable to Maintenance.

Сара	city.	When Employed	Names.	Time.	Rate.	Amount.
	Assistant, No. do No.	Employed	Andrew Hamilton John Howe Walter Weaver James Howe Arthur Carl John Turnbull William Hare Hugh Hagen Robt. Boyle Horton Plumsted Arthur Bradley William Wilson Casper Bradley Martin Nestor Alex. Winslow Henry Hair James Delaney Robt. Gibson Frank Weaver John Armstrong James Madill Robt. Bradley	11 days 25 do 26½ do 27 do 15 do 18½ do 22³ do 12½ do 26 do 12½ do 27 do 27 do 25 do 25 do 25 do 25 do 25 do 26 do 27 do 27 do 28 do 29 do 21 do 21 do 21 do 22 do 23 do 24 do 24 do 24 do 25 do 25 do 27 do 27 do 28 do 29 do 21 do	\$ cts. 1 00 1 00 1 00 1 00 1 00 1 00 1 00 1	\$ cts. 11 00 25 00 26 50 27 00 15 00 18 50 23 00 12 50 26 00 13 00 27 00 25 00 25 00 25 00 21 00 21 00 21 00 21 00 21 00 21 00 21 00 21 00 21 00
do do do do Bridge Tender, do	do No.: do No.: do No.: do No.: Lock No St. Catharine	2 Aug., 1854 3 Oct., 1854 4 Dec., 1865 5 Apr., 1866 2 June, 1863 3. Sept., 1853	William Burley Stephen Kane Stephen Kane Stephen Kane Stephen Kane Patrick Friel Scharles Kearnes Dennis Daley John McNamara Stephen Kanamara S	27 do 27 do 27 do 27 do 26 do 21½ do	1 00 1 00 1 00 1 00 1 00 1 00	27 00 27 00 27 00 27 00 27 00 26 00 21 50 12 00

Accounts chargeable to Welland Canal, April, 1870, Maintenance.

Date.		\$	cts.	\$ cts.
1870. April	Wm. J. & J. McCalla— To 109 galls. coal oil, at 40 cts	5 5 5	60 00 00 50	 59 10 8 00 67 10

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 1, during the month of May, 1870, to Office Establishment, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Paymaster and clerk	Mar., 1842 Aug. 1852	Thos. Adams	1 month 1 do	\$ cts. 120 00 12 00	\$ cts. 120 00 12 00 132 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No 2, during the month of May, 1870, to St. Catharine's Establishment, Harbor Master, Head Carpenter, Overseer of Works, Lock and Bridge Tenders, from Dalhousie to Thorold, chargeable to Maintenance.

Harbor master, &c., Dalhousie Jan., 1858 J. P. Boomer 1 month 93 75 93 75 Head carpenter	Capacity.	When Employed	Names.	Time.	Rate.	Amount.
	Head carpenter	Apr., 1843 Sept., 1853 July, 1856 W. Cnl.Co May, 1860 Sept., 1845 July, 1854 Sept., 1853 July, 1854 Sept., 1853 July, 1856 Apr., 1853 May, 1855 Jan., 1864 July, 1866 July, 1866	Rich Collier James Woodall Thos. Barrett Wm. Chace Jno. Nestor Wm. Walker Jas. Malpass Frank Meagher Michael Driscoll Jas. Bradley Danl. McCarthy Edw. Boyle Bart. Clarke John Reilly James Conger Thos. Flynn Geo. Darby Michl. Moran Wm. Cochrane	do do	93 75 75 00 34 00 34 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00	93 75 75 00 34 00 34 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c. - Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do do do 19 do do do 20 do do do 21 do do do 22 do do do 23 do do do 23 do do and bridge do 24 do do assistant	do 1847 do 1845 do 1854 do 1854 Dec. 1863 do 1854 Apr., 1861 Sept., 1856	Rufus Swazze	do do do do do do do do do do do	30 00 30 00 30 00 30 00 30 00 26 00 26 00	\$ cts. 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 26 00 26 00 26 00 1,132 75

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 3, during the month of May, 1870, to Port Robinson Establishment, Carpenter on repairs, Regulating Water, Lock and Bridge Tender, from Thorold to Junction, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Carpenter on repairs, Thorold Junction and Marshville Foreman in charge of water at Allanburgh Lock tender, Allanburgh do asst. do Gd. lock tender, Allanburgh do assistant do do do do do do do do do aqueduct do aqueduct Attending 2 bridges, Junction do assistant do Asst., Hursts do Marlatts	Apr, 1861 Wd. C. Co Apr., 1865 Aug., 1866 Apr., 1850 July, 1851 Apr., 1850 July, 1861 Apr., 1856 Apr., 1856 Apr., 1858 Nay, 1856 Apr., 1851 May, 1856 Apr., 1841 do 1855 Nov., 1854	Thos. R. Secord	1 month 1 do	\$ cts. 75 00 30 00 30 00 30 00 30 00 30 00 30 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00	\$ cts. 75 00 30 00 30 00 30 00 30 00 30 00 30 00 30 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00
do Allanburgh do Asst. do do Port Robinson do Asst. do do Quaker do Burgess do Asst, Burgess do Asst do Aqueduct	Apr., 1866 Sep., 1854 July, 1865 Aug., 1863 do 1865 do 1845 Feb., 1866 Aug., 1866	John Gearon Jas. Waters Wm. Leary George Thomson Jas. Welch Nelson Higgins Bart. Brennan Hugh Quinlan Jas. Edmund Jas. Foster David Tuft	1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do	26 00 26 00 26 00 26 00 26 00 26 00 26 00	26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 26 00 761 00

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 4, during the month of May, 1870, to Port Colborne Establishment, Harbor Master, Overseer of Works, Regulating Water, Lock and Bridge Tender, from Junction to Colborne, chargeable to Maintenance.

Capacity.	When E m ployed	Names.	Time.	Rate.	Amount.
do do do do do do Laborer on Banks, &c Attending Ferry Scow Bridge Tender, Stone Bridge	do 1849 Ang., 1853 May, 1856 April, 1851 Aug., 1854 do 1863 June, 1869	John McGillivray John Sweeney John Hinchey Patrick Fahey Michael Madden Edward Hanley	do do do do 26 days 1 month	\$ cts. 50 00 24 00 34 00 34 00 1 00 34 00 26 00 26 00	\$ cts. 50 00 34 00 34 00 34 00 34 00 34 00 26 00 26 00 26 00 298 00

PAY LIST in duplicate of persons employed on the Welland Canal, Sheet No. 1, Division No. 5, during the month of May, 1870, to Port Maitland Establishment, Foreman and in charge of Water Lock and Bridge Tender, from Maitland to Dunnville, chargeable to Maintenance.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Foreman and in charge of water at Dunnville	Welland			\$ cts.	\$ cts.
Guard Lock Tender, Dunnville.	Canal Co	Frank Ramsay	1 month	50 00	50 00
and checking lock passes Lock Tender, Port Maitland	June 1856	Robert Morrison	do	30 00	30 00
_	Canal Co	Thomas Connor		30 00	30 00
do Assistant Attending two Bridges, Bridge	April, 1866	Patrick Cummings		26 00	26 00
Creek	_do 1866	George Harris	do	26 00	26 00
Laborer on Banks, &c	June, 1851	Chas. Thrush	28 days	1 00	28 00
					190 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, Sheet No. 1, Division No. 6, during the month of May, 1870, to Lock Laborers' Establishment. Lock and Bridge Tenders, from Dalhousie to Thorold, chargeable to Maintenance.

C	apacity.		When Employed	Names.	Time.	Rate.	Amount.
T . 1			100	A - 3 TY - 114	1	\$ cts.	\$ cts
		No. 1!	Aug., 1864	Andrew Hamilton	. I month		34 00 34 00
do	do			John Howe		00.00	34 00
do	do			Walter Weaver		1 00 00 1	30 00
do	do	2	Aug., 1004	James Howe	1 do	00.00	30 00
ďο	do		April, 185	Nestor Carroll	1 do		
do	do	4	do 1850	John Turnbull	. I do		34 00
do	do	5	do 186	Wm. Hare	. 1 do		30 00
фo	do	6	do 185	Hugh Hagan	. 1 do		30 00
do	do	7		Robt. Boyle			30 00
do	do	8		Horton Plumsted			30 00
фo	do			Arthur Bradley			30 00
d●	do	10		7 Wm. Williams			30 00
do	do			Casper Bradley			30 00
do	do			3 Martin Nestor			30 00
do	do			8 Alex. Winslow			30 00
do	do			7 Henry Hair			30 00
$d\mathbf{o}$	do	15	Sept., 185	6 James Delaney	1 do		34 00
ďо	do			8 Robt. Gibbons			30 00
фo	do			2 Frank Weaver		. 30 00	30 00
do	do			5 John Armstrong		. 30 00	30 00
do	do	19	June, 185	3 James Madill	1 -do		30 00
do	do	20	do 185	3 Robt. Bradley	1 do		30 00
do	do			3 Jas. McAuley			30 00
do	do			4 Wm. Burley			30 00
do	do	23	Oct., 185	4 Stephen Hare			30 00
do	do			3 Austin Moran			30 00
do	d o	25	April, 185	6 Patk. Friel	1 do		30 00
Bridge tende	r, Lock No. 2		June, 186	3 Chas. Kearnes	1 do		26 00
ິdo	St. Cathar	ines	Sept., 185	9'Dennis Dalev	∣1 d o		26 00
do	Keefer's	•••••	Oct., 186	John McNamara	1 d o	26 00	26 00
							904 00

ACCOUNTS Chargeable to Welland Canal, May, 1870, Maintenance.

· Date.	Nature of Work.	\$ cts.	\$ cts.
May 31	To John McGillivray— 12 months house rent, ending 1st March last, at \$7 per month To Wm. J. & J. McCalla— 49 gallons coal oil, at 40c	19 60 5 25	25 29 109 29

WELLAND CANAL.

NUMBER of Estimate 1038. Final estimate of work done and materials delivered from the beginning of the work to the 31st July, 1869, by John Brown. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200, to Repair, Welland Canal.

Description of Works and Materials.	Amount.
Dredging below locks Nos. 2 and 3, 11 days, at \$75, and 11 days tug boat, at \$25 Dredging near Ramsay's Bend, 6,415 cubic yards, at 35c	\$ cts. 1,100 00 2,245 25
	3,345 25

Number of Estimate 1089. Final estimate of work done and materials delivered from the beginning of the work to the 31st July, 1869, by John Brown. The work, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$8,800, to Repairs, Welland Canal, Dunnville Break.

Description of Works and Materials.	Amount.
Use of dredge and tug boat at Dunnville Break, 6½ days, at \$100	\$ cts. 650 00 825 00 30 00

Number of Estimate 1090. Final estimate of work done and materials delivered from the beginning of the work to the 31st July, 1868, by Lewis Shickluna, by Letter No. 7448. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200 to Repairs, Welland Canal—Repairs scow.

Description of Works and Materials.	Amount.
Shipwrights, 3\frac{1}{4} days, at \$2.25	\$ cts. 8 75 45 94 45 50 23 55 12 39 1 44

Number of Estimate 1091. Date of Contract 18th April, 1869. Final estimate of work done and materials delivered from the beginning of the work to the 31st July, 1869, by P. J. Phelps, on contract work ordered by Letter No. 7448. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200 to Repairs, Welland Canal.—Forging iron.

Description of Works and Materials.	Amount.
Furnishing and forging iron screw bolts, &c., 592 lbs., at 7c do do plates, bands, &c., 1241 lbs., at 6c. do do rag bolts, 267 lbs., at 4½c Forging iron screw bolts, &c., 76 lbs., at 4c do plates, bands, &c., 972 lbs., at 3c do lifting rods, 150 lbs., at 2c Furnishing and forging crow bar, 20 lbs., at 8c	3 04 29 16 3 00 1 60
	164 71

NUMBER of Estimate 1092. Final estimate of work done and materials delivered from the beginning of the work to the , 188, by Chester Dunam, by Letter No. 7443. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200 to Repairs, Welland Canal-Repairs bridges, &c.

Description of Works and Materials.	Amount.
Carpenters' labor, 7 days, at \$2.50	\$ cts. 17 50 42 75 13 12 20 21

Number of Estimate, 1093. Final estimate of work done and materials delivered from the beginning of the work to the 31st July, 1869, by N. & P. J. Phelps; Letter No. 7448. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals authorizing an expenditure of \$17,200 to Repairs, Welland Canal.—Lumber furnished.

Description of Works and Materials.	Amount.
3-inch pine plank, 1,108 ft., B. M., at \$10	\$ cts. 11 08 123 73 8 31 20 52 20 38

Number of Estimate, 1016. Date of Contract, 20th April, 1868. Number of Contract, 2580. Final estimate of work done and materials delivered from the beginning of the work to the 31st July, 1868, by Yale & Co., on contract work ordered by Letter No. 2775. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals authorizing an expenditure of \$13,000 to Repairs, Wellant Canal.

Description of Works and Materials.	Amount.
Castings, 5,761 lbs., at 4c. Wrought iron, 429½ lbs., at 10c Brass, 99½ lbs., at 40c Value of pine poxes and kegs, 14, at \$12.50 Fitting 7 old valves, at \$5; drilling 3 valves, at \$1.50	\$ cts. 230 44 42 95 39 80 35 00 39 50

Number of Estimate, 1094. Date of Contract, 30th April, 1869. Number of Contract, 2575. Final estimate of work done and materials delivered from the beginning of the work to the 31st August, 1869, by Wm. J. & J. McCalla, on contract work ordered by Letter No. 4748. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals authorizing an expenditure of \$17,200 to R pairs, Welland Canal.

Description of Works and Materials.		ıt.
Spikes, 896 lbs., at 4½c	40 24 54 50 78 28 8 2 18	cts. 32 63 50 00 00 59 05 83 25 03

Number of Estimate, 1095. Final estimate of work done and materials delivered from the beginning of the work to the 31st August, 1869, by N. & P. J. Phelps, on contract work ordered by letter No. 4748. The works, the details of which are given in the Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200 to Repairs, Welland Canal.

Descr	iption of Wo	orks and Materials.	Amour	ıt.
Sawn oak posts, &c., for gates do girts, &c. do Sawn pine gate plank do lumber do 2-inch plank do 3-inch plank	(feet B. M.). do do do do do	, 2,706, at \$19	51 51 25 2	00 11 37 67

Number of Estimate, 1096; final estimate of work done and materials delivered from the beginning of the work to the 31st August, 1869, by Charter Demara, on work ordered by letter No. 4748. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200 to Repairs, Welland Canal. Repairs and painting Bridges, Lock-gates, &c.

Description of Works and Materials.	Amount.
Carpenters, 7 days at \$2.50	\$ cts. 17 50 24 75 54 00 55 68 1 75

Number of Estimate, 1097. Date of Contract, 18th April, 1869. Final estimate of work done and materials delivered from the beginning of the work to the 31st August, 1869, by P. & J. Phelps on contract work ordered by Letter No. 4748. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200 to Repairs, Welland Canal. Forging Iron.

Description of Works and Materials.	
Furnishings and forging iron, screw bolts, &c., 1,348 lbs., at 7 cts	\$ cts 94 36 46 32 30 15 22 20 43 53 3 00

Nunber of Estimate, 1098. Date of Contract, 20th April, 1869. Final Estimate of work done and materials delivered from the beginning of the work to the 31st August, 1869, by Yale & Co., successor late C. Yale, on contract work ordered by Letter No. 4748. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200 to Repairs, Welland Canal. Castings, &c.

Description of Works and Materials.	
Castings, 120 lbs., at 4 cts Wrought iron, 91 lbs., at 10 cts Brass, 53 lbs., at 40 cts Brass Matrixes on old screws, 31 lbs., at \$6 Repairing old screws, 12 lbs., at \$1 New valves complete, 4 lbs., at \$67.29	\$ cts. 4 80 9 10 21 20 186 00 12 00 269 16
LESS—For old castings	502 26. 50 00
Valve, 913 lbs.; with rail, 113 lbs.; narrow rail, 97 lbs.; 2 ends, 253 lbs—1,376 lbs., at 4 cts	452 26

NUMBER of Estimate, 1099. Final estimate of work done and materials delivered from the beginning of the work to the 30th September, 1869, by P. & J. Phelps on contract work ordered by Letter No. 4748. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canais, authorizing an expenditure of \$17,200 to Repairs, Welland Canal.

Description of Works and Materials.	
Sawn oak, posts, &c., for gates, B.M., 165, at \$19	\$ cts 3 13 216 25 80 84 14 61 314 83

NUMBER of Estimate, 1100. Date of Contract, 18th April, 1869. Final estimate of work done and materials delivered from the beginning of the work to the 30th September, 1869, by P. & J. Phelps on contract work ordered by Letter No.

The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200 to Repairs, Welland Canal.

Description of Works and Materials.			
Furnishing and forging iron screw bolts, &c., 2,010 lbs., at 7c	\$ cts 140 70 5 04 19 93 3 68 10 92 29 85 52 00		
	262 12		

NUMBER of Estimate 1,101. Date of Contract, 30th April, 1869. Final estimate of work done and materials delivered from the beginning of the work to the 30th September, 1869, by Wm. J. & J. McCalla, on contract work ordered by Letter No. 4,748. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200, to Repairs, Welland Canal—Sundries.

Description of Works and Materials.	
pikes, 1,344 lbs., at 4½c	39 40
The state of the s	211 53

Number of Estimate 1102. Estimate of work done and materials delivered from the beginning of the work to the 30th September, 1869, by Yale & Co., on work ordered by Letter No. 4743. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals—Repairs.

Description of Works and Materials.	
Castings, 1,689 lbs., at 4c Wrought iron, 184 lbs., at 10c Brass, 104 lbs., at 40c New brass matrixes and old screws, 27 lbs., at \$6 Repairs, old screws, 15 lbs., at \$1 Hinges for office shutters, 6 lbs., at 37½c	\$ cts. 67 56 18 40 41 60 162 00 15 00 2 25

NUMBER of Estimate, 1103. Final estimate of work done and materials delivered from the beginning of the work to the 30th September, 1869, by Charter Demara, on work ordered by Letter No. 4748. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals authorizing an expenditure of \$17,200 to Repairs, Welland Canal, Bridges, &c.

Description of Works and Materials.	
Carpenters, 8½ days, at \$2.50	25 12

Number of Estimate, 1104. Final estimate of work done and materials delivered from the beginning of the work to the 30th September, 1869, by J. P. Abbey. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals authorizing an expenditure of \$17,200 to Repairs, Welland Canal—Repairs, Scows.

Description of Works and Materials.	Amount.
Shipwrights, 19 days, at \$2.00	\$ cts. 38 00 129 93 30 82 70 51 54 47

Number of Estimate, 1105. Final estimate of work done and materials delivered from the beginning of the work to the 31st October, 1869, by N. & P. J. Phelps, on contract work ordered by Letter No 4748. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals authorizing an expenditure of \$17,200 to Repairs, Welland Canal—Lumber furnished.

Des	cription of	Works	and Materials.	Amou	nt.
3 in. do	3, 6 10	do	at \$19.00	63 36	
				441	72

NUMBER of Estimate, 1106. Final estimate of work done and materials delivered from the beginning of the work to the 31st October, 1869, by John Hammond, on work ordered by Letter No. 4748. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals authorizing an expenditure of \$17,200 to Repairs, Welland Canal—Stone delivered at Dunnville Dam, &c.

Description of Works and Materials.	Amount.
Stone delivered at Dunnville waste weirs, 87 cords, at \$4.50. Gravel delivered on embankments, 120 yards, at 60c.	\$ cts. 391 50 72 00

NUMBER of Estimate, 1107. Final estimate of work done and materials delivered from the beginning of the work to the 31st October, 1869, by Irwin & Duvall, on work ordered by Letter No. 4748. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals authorizing an expenditure of \$17,200 to Repairs, Welland Canal—Lumber furnished.

	Description of Works and Materials.	A mour	1 t.
Pine lumber, 5,8 Oak do 2,4 Hauling, \$13; 4 'Carpenter, 1 da	666 ft., B.M., at \$11	64	
		122	47

Number of Estimate, 1108. Final estimate of work done and materials delivered from the beginning of the work to the 31st October, 1869, by Chester Demara, on work ordered by Letter No. 4748. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Esilways and Canals authorizing an expenditure of \$17,200 to Repairs, Welland Canal—Bridges and Culvert at Brown's Ditch.

Carpenter, labor, 31½ days, at \$2.50	\$ ct 78 75 161 62 16 2
spikes, at 5 cts White oak piles, furnished and dressed, 13, at \$15	47 33 76 94 105 84 70 81 65 00

Number of Estimate, 1109. Final estimate of work done and materials delivered from the beginning of the work to the 31st October, 1869, by Yale & Co., successors to C. Yale, on contract work ordered by Letter No. 4748. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals authorizing an expenditure of \$17,200 to Repairs, Welland Canal—Castings, &c.

Description of Works and Materials.	Amoun	ı t.
Castings, 2,289 lbs., at 4 cts	10 14 55 4 7 269 364	56 90 40 00 04 95 30 16 00 63

NUMBER of Estimate 11.0. Date of contract, 18th April, 1863. Number of contract 2581. Final estimate of work done and materials delivered from the beginning of the work to the 31st October, 1869, by P. & J. Phelps, on contract work, ordered by Letter No. 4,748. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200 to Repairs, Welland Canal—Forging iron.

Description of Works and Materials.	Amount.
Furnishing and forging iron, screw bolts, &c., 2,478 lbs., at 7c	45 58 11 56

Accounts Chargeable to Welland Canal Repairs, for October, 1869.

Nature of Works.	Amount.
Tug "T. R. Secord", Port Robinson—Towing "Secord" from Port Robinson to Thorold George Vanderburgh, Allanburgh—Forging iron bolts, 396 lbs., at 5c	\$ cts. 8 00 19 80 28 50 2 00 5 00 63 30

Number of Estimate, 511. Progress estimate of work done and materials delivered from the beginning of the work to the 31st October, 1869, by David Irvin, on contract work ordered by Letter No. 5141. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$3,592 to protection works to dam at Dunnville.

Description of Works and Material.	Amount.
Piles furnished and driven, 45 ft. long, 25 at \$5.50	\$ cts. 137 50 100 00 36 00 50 00 350 00

Number of Estimate, 517. Progress estimate of work done and materials delivered from the beginning of the work to the 30th November, 1869, by David Irvin, on the contract work ordered by Letter No. 5441., The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$3,592 to protection works to dam at Dunnville.

Description of Works and Materials.	Amount.
White oak piles furnished and driven, 45 ft. long, 10 at \$15.50	100 0 0
	1,412 25

Number of Estimate, 519. Progress estimate of work done and materials delivered from the beginning of the work to the 31st December, 1869, by David Irvin, on contract work ordered by Letter No. 5,441. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$3,592 to protection works to dam at Dunnville.

Description of Works and Materials.	Amount.
White oak piles furnished and driven, 45 ft. long, 10, at \$5.50	100 00 180 00 310 25 36 00 126 00 267 00 170 64 18 00 83 22 277 00

NUMBER of Estimate, 526. Progress estimate of work done and materials delivered from the beginning of the work to the 28th February, 1870, by David Davin, on contract work ordered by Letter No. 5,441. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$3,592 to protection works to dam at Dunnville.

Description of Works and Materials.				
White oak piles furnished and driven, 45 ft. long, 30, at \$5.50	180 00 180 00 310 25 36 00 387 00 270 00 21 60 88 50 390 00 828 85 18 00			
	2,821 20			

Number of Estimate 529. Final estimate of work done and materials delivered from the beginning of the work to the 31st March, 1870, by David Irvin on contract work ordered by Letter No. 5441. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$3,592 to protection work to dam at Dunnville.

Description of Works and Materials.					Amour	2t.	
do do do do lron shoes furnishe White oak timber, f do Docking put in won Gravel furnished al Iron bolts furnished Executing unmeasu White oak sheeting Furnishing materia	do do do do do for piles, 24, a furnished cap in o put in k, not furnished d put in work, l, 1527 lbs., at 6 red work, 63 de facing dock, 2- is and making l	40 d 35 d 30 d \$1.50c piles, 1935 dock, 1620 1, 1498 feet, 685 cubic y 6cys, at \$1.50 in. waling, adders, 5, a	10 20, at 10 40, at 10 73, at 10 73, at 10 10 at 18 at 6c	t 5.00 t 4.50 t 4.25 c c sc	44	. 165 100 180 310 36 387 291 . 89 411 91 . 94	00 00 25 00 60 88 00 62 50 00
te lead furnish	ed, 4 kegs, at \$	3		• • • • • • • • • • • • • • • • • • • •	••••	3,072	00

NUMBER of Estimate 1111. Final estimate of work done and materials delivered from the beginning of the work to the 30th November, 1869, by Tucker & Rannie, on work ordered by Letters Nos. 4743 and 5650. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200 and \$2,400 to Repairs. Welland Canal.—Lumber furnished, &c.

Description of Works and Materials.	Amount.
Sawn pine lumber, 5827 feet, per B. M., at \$12	\$ cts 69 92 0 84 1 66 3 82 1 29

Number of Estimate, 1112. Final estimate of work done and materials delivered from the beginning of the work to the 30th November, 1863, by N. & B. Phelps on work ordered by Letters Nos. 4748 and 5650. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200 and \$2,400 to Repairs, Welland Canal.—Lumber furnished.

De	scription o	f Works	and M	ate	erials.	Amour	nt.
3-inch oak plank, 2-inch do and lumber Sawn pine gate plank, 2-inch pine plank, 3-inch do Sawn pine timber,	1,692 4,400 4,192 4,666 2,298 666	do do do do do	15 16 12 10 10 11 11 11 11 11 11 11 11 11 11 11	00 00 50 50 00	M	25 7(5) 48 2)	9 2 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9

Number of Esimate, 1113. Date of Contract, 18th April, 1869. Final estimate of work done and materials delivered from the beginning of the work to the 30th November, 1869, by P. & J. Phelps on contract work ordered by Letters Nos. 4748 and 5650. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200 and \$2,400 to Repairs, Welland Canal.—Forging iron.

Description of Works and Materials.	Amoun	ıt.
Iron furnished and forged, screw bolts, &c., 2,145 lbs., at 7 cts	150 98 5 1 20 59 33	10 22 60 93 19 00 08

NUMBER of Estimate, 1114. Final estimate of work done and materials delivered from the beginning of the work to the 30th November, 1869, by Charter Demara. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200 and \$2,400 to Repairs, Welland Canal—Repair bridges, &c.

Description of Works and Materials.	Amoun	ıt.
Carpenter's labor 5 days, at \$2.50	12	cts. 50 75 75 60 68 90 96 78

Number of Estimate, 1115. Date of Contract, 30th April, 1869. Number of Contract, 1115. Final estimate of work done and materials delivered from the beginning of the work to the 30th November, 1869 by William J. & J. McCalla on contract work ordered by Letters Nos. 4748 and 5650. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$17,200 and \$2,400 to Repairs, Welland Canal.—Sundries.

Description of Works and Materials.	Amoun	ı t.
Manilla rope, 110 lbs., at 12½c	13 4 25 40 s,	cts. 75 75 82 25

Number of Estimate, 1116. Final estimate of work done and materials delivered from the beginning of the work to the 31st December, 1869, by Peter Gibbins. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals authorizing an expenditure to Repairs, Welland Canal.—Sundries.

	
Tron furnished, 911 lbs., at 3 cts do 39 lbs., at 3-3 cts.; 16 lbs., at 4 cts.; 28 lbs., at 6\frac{1}{2} cts 60 lbs. chain, at 9 cts.; 4 lbs. chub nails, at 50 cts 8 kegs white lead, at \$2.62\frac{1}{2}; 6 kegs, at \$2.37\frac{1}{2}; 3 kegs, at \$2.25 5 galls. boiled oil, at \$1.12\frac{1}{2}; 8 galls. raw oil, at \$1.18\frac{1}{2}; 3\frac{1}{2} galls., at \$1 Turpentine, 38 cts.; lamp black, \$1; \frac{1}{2} gall. varnish, \$1.50; 6 lbs. putty, 36 cts.; 1 bottle oil, 31 cts	\$ ct 27 3 3 76 5 96 41 75 17 65

NUMBER of Estimate, 1117. Final estimate of work done and materials delivered from the beginning of the work to the 31st December, 1869, by Elsenhans & Schliffle. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals authorizing an expenditure to Repairs, Welland Canal.—Forging iron.

Description of Works and Materials.	Amount.
Iron furnished and forged, 240\frac{3}{4} lbs., at 8 cts	\$ cts. 19 26 75 96
	95 22

NUMBER of Estimate, 1118. Final estimate of work done and materials delivered from the beginning of the work to the 31st December, 1869, by P. & J. Phelps. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure to Repairs, Welland Canal.—Forging iron.

Description of Works and Materials.	Amount	:•
lron furnished and forged, screw bolts, &c., 1,422 lbs., at 7 cts	\$ c 99 5 25 9 57 5 11 8 17 45 9 3 5	54 50 50 58 85 99.

Number of Estimate, 1119. Final estimate of work done and materials delivered from the beginning of the work to the 31st December, 1869, by N. & R. Phelps. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure to Repairs, Welland Canal.—Lumber furnished.

Descri	ption of V	Vorks an	d Ma	terials.	Amour	ıt.
Sawn oak for heel posts and gat do &c., for girts, &c. Sawn pine lumber do 2-inch plank	es, 6,504 ft 8,522 1,728 1,327	B.M., a do do do	1.4	00	123 136 19	35 00 93

Number of Estimate, 1120. Final estimate of work done and materials delivered from the beginning of the work to the 31st January, 1870, by John Hammond. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure to Repairs, Welland Canal.

Description of Works and Materials.	Amount.
Gravel delivered, 36 c. yds., at 60 cts	\$ cts. 21 60 36 00
	57 60

NUMBER of Estimate, 1121. Final estimate of work done and materials delivered from the beginning of the work to the 31st January, 1870, by Irwin & Duvall. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure to Repairs, Welland Canal.

Description of Works and Materials.	Amount.
Sawn pine lumber, 2,834 ft., B.M., at \$11	\$ cts 31 17 12 68 3 50
	47 35

NUMBER of Estimate, 1122. Final estimate of work done and materials delivered from the beginning of the work to the 31st January, 1870, by J. Amsden. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, anthorizing an expenditure to Repairs, Welland Canal.

Description of Works and Materials.	Amount.
Hachine oil, 10 galls., at \$1.25	7 23 6 19

Number of Estimate, 1123. Final estimate of work done and materials delivered from the beginning of the work to the 31st January, 1870, by Edward Grant. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure to Repairs, Welland Canal.

Description of Works and Materials.	Amount.
Construction of lower lift gates for Colborne Lock, complete	\$.ets. 758.00 28 00
	730 00

NUMBER of Estimate, 1124. Date of Contract, 20th April, 1883. Number of Contract, 2530. Final estimate of work done and materials delivered from the beginning of the work to the 31st January, 1870, by Yale & Co., successors to late F. Yale, on contract work. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure to Repairs, Welland Canal.

Description of Works and Materials.	Amoun	ıŁ.
Castings, 2,907 lbs., at 4c. Wrought iron, 227 lbs., at 10c	116 22 34	
LESS for 220 lbs. old brass, at 12½c	214 27	13 50
, s	186	63

NUMBER of Estimate, 1125. Date of Contract, 30th April, 1863. Number of Contract, 2575. Final estimate of work done and materials delivered from the beginning of the work to the 31st January, 1870, by Wm. J. & J. McCalla, on contract. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals authorizing an expenditure to Repairs, Welland Canal.

Description of Works and Materials.	Amoun	t.
Spikes, 448 lbs., at 4½c	20 6 32 18 28 11 36	25 50 80
	161	37

Number of Estimate, 1126. Final estimate of work done and materials delivered from the beginning of the work to the 28th February, 1870, by John Berryman, on contract work ordered by Letter No. 6225. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railway and Canals, authorizing an expenditure of \$20,000 to Repairs, Welland Canal, Swing Bridges at Locks Nos. 4 and 5.

Description of Works and Materials.	Amount.	Total.
Bridge across Lock No. 4:— Swing, complete	7 00 25 82 77 34 80 00 660 00 328 20 55 44 6 50 8 00 146 88	\$ cts 1,015 46
Total	•••••	2,220 48

Number of Estimate, 1127. Final estimate of work done and materials delivered from the beginning of the work to the 28th February, 1870, by Charter Demara, on contract work, ordered by Letter No. 6225. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$20,000 to Repairs, Welland Canal—Bridge over Port Colborne Lock.

Description of Works and Materials.	Amour	at:
Swing complete	\$ 600 29 27 59 15	10 23 01 90

Number of Estimate, 1128. Name of contractor, William Walker. Final estimate of work done and materials delivered from the beginning of the work to the 28th February, 1870, by William Walker, on contract work ordered by Letter No. 6225. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$20,000 to Repairs, Welland Canal—Tow path bridge over 12-Mile Creek, at St. Catharines.

	Descript	ion of Works and Materials.	Amour	ıt.
Pine timber furnished do Oak plank Iron bolts	and put in o do do do	order, 678 feet, at 22c	149 95	cts. 16 48 44 64
			326	72

Number of Estimate, 1129. Name of contractor, Edward Grant. Final estimate of work done and materials delivered from the beginning of the work to the 28th February, 1870, by Edward Grant, on contract work ordered by Letter No. 6225. The work, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$20,000 to Repairs, Welland Canal.

Description of Works and Materials.	Amount.
Constructing gates for Lock No. 16, 2, at \$120 each	\$ cts. 240 00 40 00 40 00 320 00

Number of Estimate, 1130. Final estimate of work done and materials delivered from the beginning of the work to the 28th February, 1870 by L. Shickluna. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$20,000 to Repairs, Welland Canal—Repairs, scow, &c.

Description of Works and Materials.	Amount.
se of pile driver, 11 days, at \$3	\$ ct 33 00 17 80 9 00 5 55
2 lbs. spikes, 72c.; 18 lbs. oakum, \$2.25; 752 ft. timber, at 17c., \$12.78	15 7 11 5 8 0
	100 6

NUMBER of Estimate, 1131. Estimate of work done and materials delivered from the beginning of the work to the 28th February, 1870, by John Hammond, on work ordered by Letter No. 6225. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$20,000 to Repairs, Welland Canal.

Description of Works and Materials.	Amount.
Stone delivered at Sulphur Creek Bridge, 16 cords, at \$3	\$ cts. 48 00

NUMBER of Estimate, 1132. Final estimate of work done and materials delivered from the beginning of the work to the 28th February, 1870, by N. & O. Z. Phelps, on centract work ordered by Letter No. 6225. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$20,000 to Repairs, Welland Canal.

		Descripti	on of W	ork	s and	Mate	rials.	Amou	n t .
Sawn do do do do do	oak for posts, gates do girts do pine gate plank do lumber do 2 inch plank do 3 do	, 799 ft 12,064 10,000 10,324 6,588 650	do do do do do do	at at at	\$19.00 16.00 12.50 11.00 10.50 10.00	do	M	15 198 125 113 69	cts 18 02 00 56 17

Number of Estimate 1133. Name of Contractor, P. J. Phelps. Date of contract, 18th April, 1863. Number of contract, 2,581. Final estimate of work done and materials delivered from the beginning of the work to the 28th February, 1870, by P. & J. Phelps, on contract work ordered by Letter No. 6225. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$20,000, to Repairs, Welland Canal.

Description of Works and Materials.	Amoun	t.
Furnishing and forging iron screw bolts, &c., 1,960½ lbs., at 7c do do plate bands, &c., 3,025 lbs., at 6c do do suspension bars, &c., 1,430, at 5c do do rag bolts	137 181 71 3 1 5	50 50 60 68 95 73

Number of Estimate, 1134. Name of Contractor, Robert Henry. Final estimate of work done and materials delivered from the beginning of the work to the 28th February, 1870, by Robert Henry, work ordered by Letter No. 6225. The works, the details in which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$20,000, to Repairs, Welland Canal.

	1
Description of Works and Materials.	Amount.
and the second of the second o	
Too Continue of the Continue of the	\$ cts. 55 37
Iron furnished and forged, 791 lbs., at 7c	55 37

Number of Estimate, 1135. Name of Contractor, Wm. J. & J. McCalla. Date of Contract, 30th April, 1863. Number of contract, 2575. Final estimate of work done and materials delivered from the beginning of the work to the 28th February, 1870, by Wm. J. & J. McCalla; on contract work ordered by Letter No. 6225. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$20,000, to Repairs, Welland Canal.

Description of Works and Materials.	Amoun	1 t.
Spikes, 1,344 lbs., at 4½c	\$ 60 15 19 3	00
	98	28

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 1, during the month of February, 1870, to Carpenters on Repairs, Lock-gates, Bridges, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

Capacity.	When Employed.	Names.	Time.	Rate.	Amount.
Carpenter	do do do do do	John Hanning	22 do 7 do 16 do 10 do	3 00 3 00 1 50 1 50	\$ cts. 40 25 28 50 67 50 22 50 24 38 15 75 13 50

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 2, during the month of February, 1870, to Laborers on Repairs, Banks, &c., from Dalhousie to Thorold, chargeable to Ordinary Repairs.

Capacity.	When Employed.	Names.	Time.	Rate.	Amount.
Laborer at Dalhousie	do do	George Brooks John Weaver Wm. Laughlan James Gunning Michael Joyce John Beaty John Conger. John Collins John Morgan Thos. Arnott James Keller Edward Manly Daniel Meagher James Hare Thos. Osburn Bernard Brinnan George Bradt Thos. Carson Wm. Reardon Patrick Garner Wm. Fahey John Sheehan John Hamberry Michael Maloy	3 do 173 do 174 do 175 do 17	\$ cts. 12 0 200 0 8772 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ cts 11 81 6 00 15 53 13 78 16 84 16 84 13 56 15 53 14 66 15 53 14 66 11 247 12 91 13 78 15 09 12 47 13 34 1 7 66 12 25 12 91 10 72 9 84 9 41 7 44 1 00 26 50 25 50 11 00 6 75 24 00

PAY-LIST in duplicate of persons employed on the Welland Canal, Sheet No. 2, Division No. 3, during the month of February, 1870, to Laborers on Repairs Banks, &c., from Thorold to Port Colborne, chargeable to Ordinary Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Carpenter on repairs	do do	John Bruce	18 do	1 00 1 00	\$ cts. 30 00- 4 00- 18 00- 30 00- 82 00

NUMBER of Estimate, 1136. Final estimate of work done and materials delivered, from the beginning of the work to the 31st March, 1870, by William Walker, on Contract work ordered by Letter No. 6225. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$20,000 to Repairs, Welland Canal.—Tow path bridges, Barry Point.

Description of Works and Materials.	Amount.
Pine timber, furnished and put in work, 824 cubic feet, at 22c	\$ cts. 181 28 117 60 12 84

NUMBER of Estimate, 1137. Final estimate of work done and materials delivered from the beginning of the work to the 31st March, 1870, by Edmond Grant, on contract work ordered by Letter No. 6225. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$20,000 to Repairs, Welland Canal.

• Description of Works and Materials.	Amount.
Constructing gates at lock No. 10, 2, at \$120	240 00 80 00 80 00

Number of Estimate, 1138. Final estimate of work done and materials delivered from the beginning of the work to the 31st March, 1870, by N. & J. Phelps, on contract work ordered by Letter No. 6225. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$20,000 to Repairs, Welland Canal.

Description of Works and Materials.	Amount.
Sawn oak, 7,102 feet., B.M., at \$16 per M	\$ cts. 113 63 21 72 17 76

Number of Estimate, 1189. Date of contract, 18th April, 1863. Number of contract, 2589. Final estimate of work done and materials delivered from the beginning of the work to the 31st March, 1870, by P. & J. Phelps, on contract work ordered by Letter No. 6225. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$20,000 to Repairs, Welland Canal.

Description of Works and Materials.	Amount.
Furnishing and forging iron screw bolts, &c., 2,743 lbs., at 7 cts. do do plates, bands, &c., 817 lbs., at 6 cts. do do rag bolts, &c., 718 lbs., at 4½ cts. Forging iron screw bolts, &c., 1,178½ lbs., at 4 cts. do plates, bands, &c., 2,124 lbs., at 3 cts. do suspension bars, &c., 2,380 lbs., at 2 cts. do rag bolts, 263 lbs., at 1½ cts.	1 20 01

Number of Estimate, 1140. Date of contract, 20th April, 1863. Number of contract, 2,580. Final estimate of work done and materials delivered from the beginning of the work to the 1st April, 1870, by Yale & Co., on contract work ordered by Letter No. 6225. The works, the details of which are given in this Estimate, were proceeded with under the order of the Department of Railways and Canals, authorizing an expenditure of \$20,000 to Repairs, Welland Canal.

Description of Works and Materials.	Amount.
Castings, 4,279 lbs., at 4 cts. Wrought iron, 332 lbs., at 10 cts	33 20 17 40 24 00 30 00

Number of Estimate, 1156. Final estimate of work done and materials delivered from the beginning of the work to the 30th June, 1870, by Joseph Fegan. The works, the details of which are given in this estimate, were proceeded with under the order of the Department of Railways and Canals, to Repairs, Welland Canal.

Description of Works and Materials.	Amount.
Gravel delivered in embankments, 360 cubic yards at 50 cts	180 00 180 00
	360 00

WELLAND CANAL.

Vouchers-1. Staff and Working Expenses. 2. Repairs.—1st July, 1886, to 30th June, 1887.

PAYLIST in duplicate of persons employed on the Old Welland Feeder and New-Welland Canal, during the year ending 30th June, 1887, to Pay House Allowances, chargeable to Staff and Working Expenses.

Capacity.	When Employed.	Names.	Time.	Rate.	Amount.	Superan- nuation.
Look 1	July 1, 1886, to June 30, 1887.	Saml. Duffin	l year	\$ cts.	\$ cts.	e ts. 63
do 1	do	Wm. L. Smith	1 do	50 00	50 00	63
do 1		Robt. Edgraft		50 00	50 00	63
do 1		John House		50 00	50 00	
do 2		Walter Weaver		50 00	50 00	over 35 yrs
do2	do	J. Johnson		50 00	50 00	63
St. Paul St. Bridge					50 00	63
Lock 3		Fred. Sherer	1 do	50 00	50 00	63
do 5, 6 and 7		Robt Boyle		50 00	50 00	63
do do		Michael White		50 00	50 00	63
Keefer Bridge	do	A. W Bradley		50 00	50 00	63
Lock 25	do	Jno. Flunllyn	1 do	60 00	60 00	
Hurst Bridge	do	Jacob Renter	1 do	50 00	50 00	63
Marlatt's Bridge	do	Nelson Higgins	11 do	50 00	50 00	63
Allanburgh Lock	do	Wm. Higgins	1 do	60 00	60 00	over 35 yrs
do	do	Lewis Mo-ier	1 do	50 00	50 00	63
Allanburgh Gd. Lock	do	Aaron Higgins	1 do		60 00	over 35 yrs
Foreman on Banks,	do	John Gearin	1 do	5 0 00.	50 00	63
Feeder Division.	·					
Stromness Bridge Reg. of water opp. Dunn-	do	Geo. Harris	1 do	50 00	50 00	63
ville	do	Chas. Trush	1 do	60 0 0	60 00	
New Welland Canal.	,					
Port Colborne, Hurst	do	C. H. Carter	1 do	100 00	100 00	\$2 00
do Lock		Jno. Stevens		50 00	50 00	63
do Ferry, &c		Jno. Bradley			50 00	63
					1,240 00	1,208 00

PAY-LIST in duplicate of Persons employed on the Wolland Canal during the Scaron of Navigation, to pay Season Allowances, chargeable to Staff and Working Expenses.

Capacity.	When Employed	Names.	Time.	Rate.	Amount
Checking passes, keeping record of vessels passing through, towing tugs and steamers from		244		\$ cts.	\$ cts.
Lock 7 to 8	Deason or	C. B. Hare	ll googon	60 00	60 00
do do	do	Wm. Boyle	1 do	40 00	40 00
Towing tugs and steamers from	"	William Boyle	1 40	10 00	20 00
Lock 8 to 7	do	N. Hayden	1 do	25 00	25 00
d o do		R. Secord	1 do	20 00	20 00
do Lock 25		M McCarthy		25 00	25 00
do do	do	Sam. Campbell	1 do	20 00	20 00
do Port Colborne		John Henshaw		30 00	30 00
d o do		John Cook	1 do	30 00	30 00
Checking passes, keeping record of vessels passing through		<u> </u>			<u> </u>
Lock 1	do	Sam. Duffin	1 do	30 00	30 00
do do		Robt. Egraft		15 00	15 00
do Lock 25	do	John Fluellyon	1 do	20 00	20 00
					315 00

PAY-List in duplicate of Persons employed on the Welland Canal during the month of July, 1886, to pay Permanent Establishments and Account, chargeable to Staff and Working Expenses.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Superintendent	do do	R. D. Dun	l do l do	\$ cts. 2,900 00 1,400 00 1,000 00 750 00	\$ cts. 241 67 116 67 83 33 62 50
Port Colborne Overseers—	do	C. H. Carter	1 do	750 00	62 50
Division No. 1	do do do do	J. G. Demare	l do l do l do l do 31 days		100 00 75 00 50 00 65 00 65 00 38 75
Port Dalhousie Ferry	do do do do do do do do do do	Frank Smith	do do do do do do do do do do do	42 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00	37 80 42 00 45 00 45 00 45 00 45 00 47 00 47 00 45 00 45 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c.-Continued.

Capacity.	When Employed		Names.		Time		Rate.	Amount.
Division No. 1-Con.							\$ cts.	\$ ct
			J. Johnston	1 1		ı	47 00	47 00
Assistant	do	•••	John Wilde Con. Gorman		do do		45 00 45 00	45 00
do	do do		James Grogan	l	do		45 00	45 00 45 00
laster, Bridge 2	do		John Flynn	1	do		45 00	45 00
ssistant	do		Hugh Alexander	1	do		45 00	45 00
faster, Lock 4	do	•••	Joseph Franklin	1	do		47 00	47 00
ssistant	do		Samuel Hopkins		do		45 00	45 00
dodo	do do	•••		1	do	•••	45 00	45 00
do	do	•••	John Woodall Thomas Scott		do do	•••	45 00 47 00	45 00 47 00
Assistant	do	•••	John Pennington	1	do		45 00	45 00
do	do	•••			do		45 00	45 00
do	do				đo		45 00	45 00
faster, Bridge 3	do	•••	George Brownlee	- 1	ďο		45 00	45 00
Assistant	do	, •••	Michael Morarity		do	•••	45 00	45 00
laster, Lock 6	do	•••	Peter Paxton		do	•••	47 00	47 00
do	do do	•••	John Daley Chas. Sabine		do do	•••	45 00 45 00	45 00 45 00
do	do	•••	Chas. Newbold		go	***	45 00	45 00
faster, Bridge 5	do	•••	TT7:11: T7:11: //		do		45 00	45 00
Assistant	do		0		do		45 Q Q	45 00
laster, Lock 7	do	•••	C. B. Hare	.	do		47 00	47 00
ssistant	do	•••	Michael Sullivan		do		45 00	45 0
do	do	•••	William Boyle		ďο	•••	45 00	45 00
do	do		Richard Freeman		do	••••	45 00	45 00
Master, Bridge 6	do	•••	James Grant	1	do do	••••	45 00 45 00	45 00 45 00
laster, Lock 8	do	•••			do		47 00	47 00
Assistant	do	•••	William Reid		do		45 00	45 00
do	do		Robt. Secord		do		45 00	45 00
_ do	do	•••	M. McCormick		do	•••	45 00	45 00
faster, Lock 9	do	•••	R. H. Watson		do	•••	47 00	47 00
Assistantdo	do do		Jos. C Longly		do do	•••	45 00 45 00	45 00 45 00
do	do	•••	Alex. Bradt		do		45 00	45 00
Master, Bridge 7	do	•••	James Whitter		do		45 00	45 00
Assistant	do	•••	Jno. Y. Cushman		do		45 00	45 0
laster, Lock 10	do		James Bradley	. 1	do]	47 00	47 0
Assistant	do	•••	James Mulvey		do		45 00	45 0
do	do		Henry Hare		do		45 00	45 0
do	do		Thomas Wilson		do	•••	45 00	45 0
Assistant	do do	•••	Arthur Cain		do do	•••	45 00 45 00	45 0 45 0
laster, Lock 11	do		James Reynolds		do	•••	47 00	47 0
ssistant	do		Alex. Wilson		do		45 00	45 0
do	do		James Webster	. 1	do		45 00	45 0
do	do	•••	W. P. Burleigh	. 1	фo	•••	45 00	45 0
Saster, Lock 12	do	•••	William Strong		do	•••	47 00	47 0
Assistantdo	do	•••	E. Bradley F. Mughan		do	•••	45 00 45 00	45 0 45 0
do	go	•••	Tamas Ma Prida	:li	do	•••	45 00	45 0
laster, Lock 13	do		Thos. Keating		do	•••	47 00	47 0
ssistant	do	•••	Joseph Turner	. 1	do		45 00	45 0
do	do	•••	Jas. A. Bradley	. 1	do	•••	45 00	45 0
do	do	•••	Geo. Milliward	. 1	do	•••	45 00	45 0
Division No. 2.	l 							1
laster, Bridge 9	July,	1886	John Clarke	. 1		h	45 00	45 0
Assistant	do		John Black		do	•••	45 00	45 0
daster, Lock 14	do	•••	Con Nestor Jas. Winton	. [do	•••		47 0
Assistantdo	do	•••	. ju ab. W III (OI)	. 11	do		45 00	1 40

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c. -Continued.

Capacity.	When Employ		Names.		Time.	_	Rate.	Amount.	
Division No. 2-Con.							\$ cts.	\$ cts	
Assistant		1886					45 00	45 00	
Master, Lock 15	do do	••••	Thomas Aikens Jas. McAubey			••	47 00 45 00	47 00 45 00	
do	do		W. J. Wilson		3.		45 00	45 00	
đo	do		Robert Boyle		3 -		45 00	45 00	
Master, Lock 16	do	•••	Thes. Berley		-		47 00	47 00	
Assistant do	do do	•••	Sam. Bradley Austin Moran		3.		45 00 45 00	45 00 45 00	
do	do		John Holland		a -		45 00	45 00	
Master, Lock 17	do	•••	Mich. Coody	1	3 -		47 00	47 00	
Assistant	do	•••	J. Sherman				45 00	45 00	
dodo	do do	•••	Michael Dooher Michael Glynn		A.	•••	45 00 45 00	45 00 45 00	
Master, Lock 18	do	•••	James Pierson		4.		47 00	47 00	
Assistant	do	•••	George Newton	1	do .		45 00	45 90	
do	do	•••				•••	45 00	45 00	
do	do do	•••	Joseph Cook Robert Grisdale		- A - ''	•••	45 00 47 00	45 00 47 00	
Assistant	do	•••	Fred. Johnson		3 -		45 00	45 00	
do	do	•••	J. J. Duffy	1	do		45 00	45 00	
do	d2		Fred. Hoschke				45 00	45 00	
Master, Lock 20 Assistant	do		Jacob Renter		. .	•••	47 00 45 0 0	47 00	
do	do	•••	Isaac McMann Thomas Freel		a	•••	45 00	45 00 45 00	
do	do	•••	John Collins				45 00	45 00	
Master, Lock 21	do		F. C. Berrimen		4.		47 00	47 00	
Assistant	do	•••					45 00	45 00	
do do	do	•••	Adelbert Clarke		J -	•••	45 00 45 00	45 00	
Master, Lock 22	do		James Ellis Wm. Hannah		do do		47 00	47 00	
Assistant	do	•••		1 -	3.		45 00	45 00	
do	do	•••	P. McNamara	1		[45 00	45 00	
do	do	•••	Henry Phillips		do do	•••	45 00 47 00	45 00 47 00	
Assistant	do	•••			3 -		45 00	45 00	
	do		Jno. Corbett		do		45 00	45 00	
Master Look 24	do	•••				•;•	45 00	45 00	
Master, Lock 24	do	•••	R. Campbell	1	do do	•••	47 00 45 00	47 00	
do	do		Thomas Bradley		do	•••	45 00	45 00	
_ do	do	•••		. 1	do		45 00	45 00	
Master, Bridge 10	do	•••	wm. Fleming	. 1	do	•••	45 00	45 00	
Assistant Master, Lock 25	do	•••	20 20 0		do do	•••	45 00 47 00	45 00 47 00	
Assistant	do	•••	A D 11		do	•••	45 00	45 00	
do	do	•••	A 20 1 11 1		do	•••	45 00	45 0	
do	do	•••			do	•••	45 00	45 00	
Master, Bridge 12		•••	1		do	•••	45 00	45 0	
Master, Guard Lock		•••	1 cm - cm - cm - cm - cm - cm - cm - cm		do do	•••	45 00 42 00	45 0 42 0	
Assistant		•••	Samuel Fraser		do	•••	45 00	45 0	
do	do		Fred. Lay	. 1	do	•••	45 00	45.0	
do Master, Bridge 13		•••	James Cook	.[1	do	•••	45 00	45 0	
Assistant			Richard Higgins William Upper		do do	•••	45 00 45 00	45 0 45 0	
Division No. 3.		•••	William Opper		u,				
Master Bridge 14	Inle	1004	Damiel O'T	١,	man41		45.00	45.0	
Master, Bridge 14 Assistant	do				monti do		45 00 40 00	45 0 40 0	
Master, Bridge 15			Geo. A. Upper Bart. O'Leary	. i	do	•••	4 2 20	45 0	
Assistant	do		Geo. Thompson		do		45 00	45 0	
Port Robinson Ferry	_	••	R. Stevenson	. 1	do	•••	30 00		
do Lock	·l do		. James McCoppin	11	do			470	

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c.—Continued.

Capacity.	When Employ		Na	mes.		Т	ime.		Rate	».	Amour	at.
Division No. 3—Con.									\$	cts.	\$	cts
Assistant		386	James Wa	alsh		1 m				00		00
Master, Bridge 16Assistant	do		James Ed Geo. P. I				do do			00		00
Division No. 4.												
Welland Lock		886	William V	Wils on. .		1 m	onth			00		00
Master. Bridge 17	do		James Fo	ster		1				00		00
Assistant	do		L. J. Bre				do			00		00
Master, Bridge 19	do		Chas. Ha				do	•••		00		00
Assistant	do		Alex. Ha				do			00		6 00 9 00
Humberstone Ferry Master, Bridge 21	do do		Michael T E. Bonab				do do			00		00
Assistant	do		Isaac Sh				do			00		00
Port Colborne Lock and Bridge	do		John Her				do	***		00		00
do do	do		John Co				do			00		.00
do do	1		John Ste				do			00		00
do do	1		Wm. Aik				do			00		00
do do	1 7		Jas. Dun				do			00	42	00
do Ferry			John Bra				do			00	42	00
Helping Ferryman	do	•••	E. Bradl	ev		4	days		1	25	ŧ	5 00
Signalling and controlling safe	do	•••	Jos. McM	urray		31	ďo		1	50	46	3.50
passage of vessels through	do		Jas. Nixo	n		31	do		_	50		3 50
Old Aqueduct at Welland	do		Wm. Nix				do		_	50		3 50
night and day	do	•••	Robert S	impson.	•••••	31	do		1	. 50	46	3 50
MACHINIST. Division No. 1.		5								1		
Keeping machinery connected)	T-1- 1		Tahn Ma	nah a 11		261	dow		9	25	50	9 63
with Lock Gates and Waste		1880	John Ma Samuel l	Tonaton	• • • • • • • •	202	do			00		6 00
weirs in proper order through-	do		E. Newa				do			50		0 50
out, &c., &c	l uo	•••	J. Newa	11, 11. 0	11 8.		u	•••		. •		
Division No. 2.												
Keeping machinery connected	July	1886	*Volney	Mann		33	dav	g			6	6 0
with Lock Gates and Waste	do		*Thos. B	van		311	- do			• • • • • •		5 1
weirs in proper order through-	do		•J. H. B				do	•••		• • • • • •		5 0
out, &c., &c	1 7			•		1 . >	_				1	2 0
Diver	. do	•••	Ed. Smil	ey	• • • • • • •	- 21	0.0	•••		• • • • • • •		
	1		1			1			I		8,31	4 4

[•] Extra time for Sunday and night work.

ACCOUNTS Chargeable to Welland Canal Staff and Working Expenses.

Date.	Nature of Work.	Amount.	Total
1886.	•	\$ cts.	\$ cts
July 31	To G. N. W. Telegraph Co., St. Catharines—Telegrams for month		7 57
April 6	To the "Mail" Printing Co., Torento—Advertising opening canals		3 50
July 31	To St. Catharines and Welland Canal Gas Light Co., St. Catharines—Instalment on contract for lighting new Welland Canal		5,900 00
do 31	To William Chelten, St. Catharines—175 galls. American coal oil, at 23c		40 25
do 31	To W. N. Garden, Welland-		
do 31	To John Mathews, Port Colborne—13 gals. coal oil (American) at 30c		7 93 3 90
Feb. 27 Mar. 12	Tassels and cord for same	48 00 3 20	
June 15	for month	1 50	59 24 3 30
1886. June 1	do canal office do	2 00	
do 31 do 31	1 clock, Port Dalhousie		10 50 3 00 17 71 20 00 360 00
do 19 do 19 do 19 do 20 do 20 do 21 do 23 do 23	Hotel bill, assistant and horse feed	2 50 1 00 0 50 2 50 1 00 1 65 2 50	14 40
	Total		5,572 45

PAY LIST in duplicate of persons employed on the Old Welland and Feeder Canal, during the month of July, 1886, to pay permanent establishment chargeable to Staff and Working Expenses.

Overseer July J. B. Smith 1 month 100 00 100 00 Master, lock 1 and bridge do Samuel Duffin do 42 00	Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Overseer July J. B. Smith 1 month 100 00 100 00 Master, lock 1 and bridge do Samuel Duffin do 42 00					\$ cts.	\$ cts.
Assistant	Overseer			1 month	100 00	100 00
Assistant	Master, lock 1 and bridge	do	Samuel Duffin	do	42 0 0	
do do do 42 00 <td></td> <td></td> <td></td> <td>do</td> <td>42 00</td> <td>42 00</td>				do	42 00	42 00
do		do	R. Edgraft	do	42 00	42 00
Master, lock 2 and bridge	do	do	John House	1 1 -	42 00	42 00
Assistant	Master, lock 2 and bridge	do	Walter Weaver	1 3- 1	42 00	42 00
do	Assistant	do	J. Johnson	3_	42 00	42 00
do	q0	do	H. Charles	ا مد ا	42 00	
Master, St. Paul Street Bridge do Wm. McClory do 38 00 42 00 <		do	John Sullivan			
Assistant	Master St. Paul Street Bridge	do	Wm. McClory			
Master, lock 3	Aggistant	do	T. Sullivan	4.		
Assistant. do Fred. Sherer. do 38 00 38 00 42 00	Master, lock 3			1 3		
Master lock 4 and bridge do James Livingston do 42 00 <t< td=""><td>Assistant</td><td>do</td><td>Fred. Sherer</td><td>1 3-</td><td></td><td></td></t<>	Assistant	do	Fred. Sherer	1 3-		
Assistant	Master lock 4 and bridge	do	James Livingston	do		
Assistant				1 4.		
Assistant	Master locks 5. 6. 7. and bridge			1 1		
Master, locks 8, 9, 10 and 11 do B. Clarke do 38 00 38 00 Master, locks 12, 13, 14, 15 and bridge do James Cogan do 38 00 38 00 Assistant do Martin Westor do 38 00 38 00 Assistant do B. Darby do 38 00 38 00 Assistant do B. Darby do 38 00 38 00 Assistant do B. Darby do 38 00 38 00 Assistant do B. Darby do 38 00 38 00 Master, locks 19, 20, 21 do E. McLaughlin do 38 00 38 00 Assistant do Robert Bradley do 38 00 38 00 Master, locks 23, 24 and bridge do John McNamara do 38 00 38 00 Assistant do John McNamara do 38 00 38 00 38 00 Mariti's bridge do John Flunllym	Assistant			1 7		
Assistant do C. W. Bradley do 38 00 38 00 Master, locks 12, 13, 14, 15 and bridge do James Cogan do 38 00 38 00 Assistant do Martin Westor do 38 00 38 00 Assistant do B. Darby do 38 00 38 00 Assistant do Robert Gibson do 38 00 38 00 Master, locks 19, 20, 21 do E. McLaughlin do 38 00 38 00 Assistant do Robert Bradley do 38 00 38 00 38 00 Master, lock 22 and Keefer bridge Assistant do John McNamars do 38 00 38 00 Assistant do John Neil do 38 00 38 00 Master, lock 25 and guard lock do John Flunllym do 38 00 38 00 Assistant do Jacob Renter do 38 00 38 00 38 00 Assistant do Marlatt's do A	Master locks 8 9 10 and 11			3.		
Master, locks 12, 13, 14, 15 and bridge do James Cogan				1 3		
Deridge			o. W. Brauley] uo] 30 00	36 00
Assistant		do	James Comen	40	20 00	20 00
Master, locks 16, 17 and 18 do B. Darby do 38 00 38 00 Master, locks 19, 20, 21 do Robert Gibson do 38 00 38 00 Assistant do E. McLaughlin do 38 00 38 00 Master, lock 22 and Keefer bridge do John McNamara do 38 00 38 00 Assistant do A. W. Bradley do 38 00 38 00 Assistant do John Neil do 42 00 42 00 Assistant do John Flunllym do 38 00 38 00 Master, lock 25 and guard lock do John Flunllym do 38 00 38 00 Assistant do Jacob Renter do 38 00 38 00 Marlatt's do do Melson Higgins do 38 00 38 00 Allanburgh bridge do A. H. Upper do 38 00 38 00 Allanburgh guard lock do A. H. Upper do 38 00 38 00	Assistant			1 ,		
Assistant	Marton looks 16 17 and 19			1 3.		
Master, locks 19, 20, 21				3.		
Assistant	Manton looks 10 20 21			1 3		
Master, lock 22 and Keefer bridge do John McNamara do 38 00 38 00 Assistant do A. W. Bradley do 38 00 38 00 38 00 Master, locks 23, 24 and bridge do John Neil do 42 00 42 00 Assistant do D. Ryckman do 38 00 38 00 Master, lock 25 and guard lock do John Flunllym do 38 00 38 00 Assistant do Jacob Renter do 38 00 38 00 38 00 Marlatt's do do Jacob Renter do 38 00 38 00 38 00 Mallanburgh bridge do A. H. Upper do 38 00 38 00 Allanburgh lock do Wm. Higgins do 38 00 38 00 Assistant do Assort do 38 00 38 00 Assistant do Oscar Upper do 38 00 38 00 Assistant do John Escott do 38	Aggistant			3 -		
Assistant	Magter look 22 and Keefer bridge	do				
Master, locks 23, 24 and bridge do John Neil do 42 00 42 00 Assistant do D. Ryckman do 38 00 38 00 38 00 Master, lock 25 and guard lock do John Flunllym do 38 00 38 00 Assistant do Rufus Swazzie do 38 00 38 00 Hurst's bridge do Jacob Renter do 38 00 38 00 Marlatt's do do Nelson Higgins do 38 00 38 00 Allanburgh bridge do A. H. Upper do 38 00 38 00 Allanburgh lock do Wm. Higgins do 38 00 38 00 Assistants do Aaron Higgins do 38 00 38 00 Assistant do Oscar Upper do 38 00 38 00 Foreman on banks do John Gearin do 38 00 38 00 Feeder division overseer do John E. Scott do 66 67 66 67		do		1 .		
Assistant	Master locks 23, 24 and bridge			1		
Master, lock 25 and guard lock. do John Flunllym do 38 00 38 00 Assistant				3.		
Assistant	Magter lock 25 and quard lock			1 3-		
Hurst's bridge.						
Marlatt's do do Nelson Higgins do 38 00 38 00 Allanburgh bridge do A. H. Upper do 38 00 38 00 Allanburgh lock do Wm. Higgins do 38 00 38 00 Assistants do Lewis Mosier do 38 00 38 00 Allanburgh guard lock do Aaron Higgins do 38 00 38 00 Assistant do Oscar Upper do 38 00 38 00 Foerman on banks do John Gearin do 38 00 38 00 Feeder division overseer do John E. Scott do 66 67 66 67 Junction lock do G. Hannah do 38 00 38 00 Feeder Flout bridge do John Henderson do 10 00 10 00 Stromness bridge do Geo Harris do 38 00 38 00 Port Maitland lock do Michael Corcoran do 38 00 38 00				1 3.		
Allanburgh bridge do A. H. Upper do 38 00 38 00 Allanburgh lock do Wm. Higgins do 38 00 38 00 Assistants do Lewis Mosier do 38 00 38 00 Allanburgh guard lock do Aaron Higgins do 38 00 38 00 Assistant do Oscar Upper do 38 00 38 00 Foreman on banks do John Gearin do 38 00 38 00 Feeder division overseer do John E. Scott do 66 67 66 67 Junction lock do G. Hannah do 38 00 38 00 Feeder Flout bridge do John Henderson do 10 00 10 00 Stromness bridge do Geo Harris do 38 00 38 00 Port Maitland lock do Michael Corcoran do 38 00 38 00 Regulating of water, &c do Chas. Trush do 38 00 38 00				1 3.		
Allanburgh lock do Wm. Higgins do 38 00 38 00 Assistants do Lewis Mosier do 38 00 38 00 Allanburgh guard lock do Aaron Higgins do 38 00 38 00 Assistant do Oscar Upper do 38 00 38 00 Foreman on banks do John Gearin do 38 00 38 00 Feeder division overseer do John E. Scott do 66 67 66 67 Junction lock do G. Hannah do 38 00 38 00 Feeder Flout bridge do John Henderson do 10 00 10 00 Stromness bridge do Geo Harris do 38 00 38 00 Port Maitland lock do Michael Corcoran do 38 00 38 00 Assistant do Wm. Brennan do 38 00 38 00 Regulating of water, &c do Chas. Trush do 38 00 38 00				ا		
Assistants				٠. ا		
Allanburgh guard lock. do Aaron Higgins do 38 00 38 00 Assistant do Oscar Upper do 38 00 3		do	Lawig Mogiar			
Assistant				1 1		
Foreman on banks			Oggar Unnan	1 .		
Feeder division overseer			John Gogwin	ً د ا		
Junction lock				1 3.		
Feeder Flout bridge						
Stromness bridge						
Port Maitland lock do Michael Corcoran do 38 00 38 00 Assistant do Wm. Brennan do 38 00 38 00 Begulating of water, &c do Chas. Trush do 38 00 38 00				ـ د ا	00.00	
Assistant					00.00	
Regulating of water, &c do do do 38 00 38 00				1 3		
	Paralating of water ha			3.		
1 200 00	medanung or maret, or c	uo	Onas. Trusn	ao] 38 00	38 00
		1	Į.		l	1,862 67

Accounts chargeable to Old Weiland and Feeder Canal, Staff and Working Expenses.

Date.	Nature of Work.	Amount.	Total.
1886. July 31	To Dunnville Electric Light Company, Dunnville:— 31 lightings, lamp, new bridge, at 12½ cts 4 do old do gd. lock	\$ cts. 3 88 0 50	\$ cts.
·	Total		4 38

PAY-LIST in duplicate of persons employed on the Welland Canal, during the month of August, 1886, to pay permanent establishment and accounts, chargeable to Staff and Working Expenses.

Capacity.	Whe Emplo		Names.	Time	·.	Rate.	Amou	a t .
	1886					\$		cte
Superintendent			William Ellis		h	2,900 p. a.		67
Paymaster	do do	•••••	Richard D. Dunn Jas. E. Lawrence			1,400 do		67 33
Accountant Harbor Master—Port Dalhousie	do		William Cook		•••	750 do		50
do Port Colborne	do	••••	Chas. H. Carter	1 do		750 do		50
Overseer—Division No. 1	do		J. G. Demare		•••	100 p. m.	100	
do do No. 2	do		James Dell		•••	75 do		.00
do do No. 3	do		A. Hamilton	1 do 1 do	•••	50 do 65 do		00
Storekeeper, &c	do		W. W. Wait		•••	65 do		00
Messenger, &c	do		Thos. J. Hartley			1.25 p. d.		75
In charge of iron and steel bridges,	[.					_		
also steam pump	do	•••••	W. Chatfield	1 mont	h	75 p. m .	75	00
Division No. 1.	1886	6.				\$ cts.	\$	cts
Port Dalhousie Ferry	Augus	ıt	Frank Smith	26 days		1 40	36	40
Master, Lock 1	do		J. M. Woodall	l mont	h	42 00		00
Assistant	do		Geo. Howe		•••	45 00		00
do	do		John Poxton Thos. Williams		•••	45.00 45.00		. 00 - 00
Master, Bridge 1	do		Frank Darby			45 00		00
Assistant	do		Phillip Olmeth		•••	45 00		00
Master, Lock 2	do		Alph. Kelley	1 do	•••	47 00	47	00
Assistant	do				•••	45 00		: 00
do	do	•••••	Burwill Merritt,		•••	45 00		00
do Master, Lock 3	do		Geo. Bowman		•••	45 00 47 00		00
Assistant	do		James Keys		•••	45 00		00
do	do		Con. Gorman		•••	45 00		00
do	do		James Grogan		•••	45 00		00
Master, Bridge 2	do		John Flynn	I do	•••	45 00		000
Assistant Master, Lock 4	do		Hugh Alexander Jos. Franklin	l do	•••	45 00 47 00		00
Assistant	do		Samuel Hopkins		•••	45 00		00
do	do		Jno. Woodall	1 do	•••	45.00		00
do	do		Wm. Altoft	1 do	•••	45 00		00
Master, Lock 5	do	••••			•••	47 00		00
Assistantdo	do		Jno. Pennington Thomas Jones		•••	45 00		90
do	do		John Wilde		•••	45 00		00
Master, Bridge 3	do		Geo Brownen		•••	45 00		90
Assistant			M. Morarity	1 do	•••	45 00		00
Master, Lock 6	do		Peter Poxton		•••	47 00		00
Assistant		••••	John Daley Chas. Newbold		•••	45 00		0(
do	do		(1) O-Line		•••	45 00 45 00		00
do Master, Bridge 5	do		Wm Elliott		•••	45 00		0(
Assistant	do				•••	45 00		00
Master, Lock 7	do		C. B. Hare	l do	•••	47 00		0
Assistant	do				•••	45 00		00
do	go	••••	Wm. Boyle		•••	45 00 45 00		00
do		••••	R. Freeman James Grant	l do	•••	45 00 45 00		00
Master, Bridge 6 Assistant	do		Alex. Stewart		•••	1 42 110 1		00
Master, Lock 8			MC 1 and TT a land		•••	47 00		7 00
Assistant	do		Wm. Reid	1 do	•••	45 00		00
do	do		Robt. Secord		•••	45 00		0
do	do		M. McCormick		•••	45 00		0
Master, Lock 9	do		R. H. Watson		•••	42 00		[□0 [□0
Assistantdo			Jas. C. Longley		•••	1 45 00 1	45	5 () 5 ()
do			Alex. Bradt		•••	1 4 00 1		Ö
Master, Bridge 7			James Whitten	1 do	•••		45	6 0
Assistant			J. Cushman		•••		45	

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c .- Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Division No. 1-Con.	1886.			\$ cts.	\$ cts
Master, Lock 10	August	James Bradley	1 month	47 00	47 00
Assistant		James Mulvey		45 00	45 00
dodo		Henry Hare Thos. Nelson		45 00	45 00
Master, Bridge 8	do		1 do	45 00 45 00	45 00 45 00
Assistant	do	John McGeachie	1 do	45 00	45 00
Master, Lock 11	do	James Reynolds	1 do	47 00	47 00
Assistant	do	Alex. Wilson	1 dol	45 00	45 00
do	do	James Webster	1 do	45 00	45 00
Moston Lock 19	do	W. P. Burleigh	l do	45 00	45 00
Master, Lock 12	do	D D 11		47 00	47 00
do	do	Frank Meighan	l do l do	45 00 45 00	45 00 45 00
do		James McBride.		45 00	45 00
Master, Lock 13		Thomas Keating		47 00	47 00
Assistant	do	Joseph Turner	1 do	45 00	45 00
do	do		1 do	45 00	45 00
do	do	George Millward	1 do	45 00	45 00
Division No. 2.	1	j	i 1		
Master, Bridge 9	do	John Black	1 do	45 00	45 00
Assistant	do		1 do	45 00	45 00
Master, Lock 14		Con. Nestor		47 00	47 00
Assistant	do	James Winton	1 do	45 00	45 00
do		John Strong	1 do	45 00	45 00
do	do	Thomas Flynn	1 do	45 0 0	45 00
Master, Lock 15	do	Thomas Aikins	1 do	47 00	47 00
do	do	James McAuley W. J. Wilson		45 00 45 00	45 00
do	do			45 00	45 00 45 00
Master, Lock 16	do	lm: - 1	l do	47 00	47 00
Assistant	do		1 do	45 00	45 00
do		John Holland		45 00	45 00
do	do			45 00	45 00
Master, Lock 17 Assistant,	do			47 00	47 00
do		Michael Dodher	l do	45 00 45 00	45 00 45 00
do		Michael Glynn		45 00	45 00 45 00
Master, Lock 18		J. S. Pearson		47 00	47 00
Assistant	do			45 00	45 00
do		Thomas Hanna		45 00	45 00
do	do		1 do	45 00	45 00
Master, Lock 19	do		1 do	47 00	47 00
do	do	1 - T D M	1 3.	45 00	45 00 45 00
do	do	TO 1 17 11	1 3	45 00 45 00	45 00
Master, Lock 20	do			47 00	47 00
Assistant	do	Isaac McMann	1 do	45 00	45 00
do	do	John Collins	1 do	45 00	45 00
do	do			45 00	45 00
Master, Lock 21 Assistant		F. C. Berrimen		47 00	47 00
do		John Cole		45 00	45 00
do		Adelbert Clarke		45 00 45 00	45 00 45 00
Master, Lock 22		Wm. Hannah		47 00	47 00
Assistant	do	Patrick McNamara	1 do	45 00	45 00
do		Wm Boyle	1 do!	45 00	45 00
do	do	Henry Phillips	1 do	45 00	45 00
Master, Lock 23 Assistant	do	Thomas Bonewell James Smerdon	1 3 - 1	47 00	47 00
do	do	John Corbett	1 3 1	45 00	45 00 45 0 0
do	do	J. Commarford	1 do 1	45 00 45 00	45 00 45 00
Master, Lock 24	do	R. Campbell	1 do!	47 00	47 00
Assistant	de	M. Henderson	1 do	45 00	45 00
do	do	Thos. Bradley	1 do	45 00	45 00
do		Henry Kerns		45 00	45 00

PAY LIST in duplicate of Persons employed on the Welland Canal, &c .- Continued.

Capacity. When Employed	Name Time. Rate. Amount.
Division No. 2—Con. 1886.	\$ cts. \$ cts.
Master, Bridge 10 August Wm.	leming
Assistant do France	s Galbraith do 45 00 45 00
Master, Lock 25 do M. Mc	Carthy 1 do 47 00 47 00
	Detlor
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20 00
	Wright
Assistant do Rober	Camp
	H. Collier 1 do 42 00 42 00
	l Fraser
do do Fred.	Lay
	Cook
	d Higgins do 45 00 45 00
Assistant do Wm.	pper 1 do 45 00 45 00
Division No. 3.	
Master, Bridge 14 do Danie	O'Leary
Assistant do Geo.	Upper
	Cheary
	'hompson
7	11 1
	McCoppin
	Edmonds 1 do 45 00 45 00
	. Misner 1 do 45 00 45 00
Welland lock do Willia	m Wilson
Bridge 17 do James	Foster
	J. Brenen
	Hannah
	Hannah
	abery
Assistant doIsaac	Shisler
	Henshaw
	Cook
() doJohn	stevens
do do do Wm. do do Jame	Aikins
	Dunlap
	dley 8 days 1 25 10 00
Signalling and controlling safe	20 00
passage of vessels doJosep	McMurray 31 do 1 50 46 50
Welland (do Rober	t Simpson 31 do 1 50 46 50
minht and day	Nixon
	m Nixon 31 do 1 50 46 50
MACHINIST. Division No. 1.	
Keeping machinery connected / do *I M	rehall gol de ger
	rshall
weirs in proper order through-	l Houston 25½ do 2 00 51 00 wall, H. & A 27 do 1 50 40 50
out	100
Division No. 2.	
Keeping machinery connected (do *Volr	v
with lock-gate and waste	ey Mann
	nas Ryan
out	
Diver do E. Sn	iley 24 ³ / ₄ do 2 00 49 50
	8,324 26

[•] Extra time for Sunday and night work.

Accounts chargeable to Welland Canal Staff and Working Expenses.

D	ate.	Nature of Work.	\$	cts.	\$	cts.
	881.					
Aug.	1-31	To G. N. W. Telegraph Co., St. Catharines—Telegrams for				70.
do	31	G. N. W. Telegraph Co., Port Dalhousie—Telegrams for				46
do do	1–31 1–31	Bell Telephone Co., Welland—Messages and conversations Bell Telephone Co., St. Catharines—Conversations and	•••••	••••••	_	10
do	1- 31	Journal Printing Co., St. Catharines—Advertising list of vessels passing through canal, 308 words, at 4c.				25
do	31	B. C. Fairfield, St. Catharines—Postage stamps for office, from July 1, 1886, to date				1 15
do. do	18 1 –31	William Chelen, St. Catharines—44 galls. coal oil, at 23c R. A. Abbey, Port Robinson—	• ••••••	•••••		12
		14 galls. coal oil, at 30c		4 20 0 11		4 28
do	1-31	John Mathews, Port Colborne— 22 galls. coal oil, at 30c. 1 gall. lard oil.		6 60 1 00		1 3£
do	1–31	W. N. Garden, Welland— 34 galls. coal oil, at 30c., \$10.20; 2 boxes matches, 26c 3 brooms, 75c.; 2 galls. lard oil, \$1.60; wick, 8c		10 46 2 43		760
Aug do	. 27 1–31	To W. T. Sawle, Welland—600 clearance cheques				2 89 4 50
do	1–31	A. Thompson, Welland—4? weeks board and lodging for C. H. Charles, in charge of old aqueduct at Welland,		••••••		0 00
do	1-31	at \$4				771. 000
do do do do do	18 19 20 23 25 27	R. D. Dunn, Paymaster, St. Catharines— Horse and buggy 1 day		2 50 3 50 1 40 3 50 0 20 3 10		
do	18-25 20	3 days board for self away on duty, at \$3		9 00	2:	2 70
au	4 0	J. E. Lawrence, St. Catharines— Fare and express, Toronto and return, for boat Paid Pim & Co.— 1 printing press, for use in canal office, copying accounts, &c		1 90 5 00 5 00	1	1 00
do	26 –29	William Ellis, Superintendent, St. Catharines—Cab fare at Catharines and Ottawa, and railway fares and expenses to and from Ottawa, Pullman fees and refreshments, conferring with Messrs. Bain, Mothersill and Tilley, re appropriations, &c				1 90
	•	appropriations, womanness and a second secon				
					55	7 35

PAY-LIST in duplicate of Persons employed on the old Welland and Feeder Canal, during the month of August, 1886, to pay Permanent Establishment and account, Chargeable to Staff and Working Expenses.

Overseer	Capacity.	Wh Emple		Names.	Tim	e.	Rate		Amoun	ıŁ
Master, Lock 1 and Bridge do Sam. Duffin. 1 do 42 00 42 0 do do 42 00 do do 42 00 42 00 do do 42 00 4							\$	cts.	\$ c	ts
Master, Lock 1 and Bridge)verseer	Augu	st	J. B. Smith	1 mor	th	100	00	100 6	06
do	laster, Lock 1 and Bridge					· c				
do									42 0	90
Master, Lock 2 and Bridge										
Assistant										
do										
do			•••••	W H Charles						
the Paul Street Bridge										
Assistant				Wm. McClorev	liä					
Asset Lock 3 do				Tim Sullivan						
Asster, Lock 4 and Bridge				Alex. Walker	1 d					
Assistant										
Assert Locks 5, 6, 7 and Bridge do Robert Böyle 1 do 42 00 42 00 Assistant do B. Clarke 1 do 38 00 38 00 Assistant do B. Clarke 1 do 38 00 38 00 Assistant do B. Clarke 1 do 38 00 38 00 Assistant do B. Clarke 1 do 38 00 38 00 Assistant do D. W. Bradley 1 do 38 00 38 00 Assistant do B. Darby 1 do 38 00 38 00 Assistant do Robt Gibson 1 do 38 00 38 00 Assistant do Robt Gibson 1 do 38 00 38 00 Assistant do Robt Gibson 1 do 38 00 38 00 Assistant do Robt Bradley 1 do 38 00 38 00 Assistant do Robt Bradley 1 do 38 00 38 00 Assistant do A. W. Bradley 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant do D. Ryckman 1 do 38 00 38 00 Assistant D. Ryckman 1 do 38 00 38 00 Assistant D. Ryckman 1 do 38 00 38 00 Assistant D. Ryckman 1 do 38 00 38 00 Assistant D. Ryckman 1 do D. Ryckman										
Assistant										
Master, Locks 8, 9, 10 and 11 do B. Clarke										
Assistant	Assistant				_					
Master, Locks 12, 13, 14, 15 and Bridge	legistant									
Bridge	Waster, Locks 12, 13, 14, 15 and	u u		O. W. Brautey	1 u	• •••	30	00	30 (J.
Assistant		do		James Cogan	1 d	o	38	00	38 (ነሴ
Master, Locks 16, 17 and 18	Assistant									
Assistant	Master, Locks 16, 17 and 18									
Master, Locks 19, 20 and 21	Assistant	do								
Master, Lock 22 and Keefer's Bridge	Master, Locks 19, 20 and 21	d5						00		
Bridge	Assistant	do		Robt. Bradley			38	00	38 (00
Assistant		_					ł			
Master, Locks 23, 24 and Bridge. do John Neil							1			
Assistant	Assistant									
Master, Lock 25 and Guard Lock do John Fluellyn 1 do 38 00 38 (0)	Assistant									
Assistant	Master, Lock 25 and Guard	_			ļ					
August's Bridge										
Marlatt's do										
Allanburgh Bridge										
do Lock do Wm. Higgins 1 do 38 00 38 0 do Asst. Lock do Lewis Mosier 1 do 38 00 38 0 do Asst. Guard Lock do Aaron Higgins 1 do 38 00 38 0 Foreman on Banks, Feeder Div do John Gearin 1 do 38 00 38 0 Overseer do John Gearin 1 do 38 00 38 0 Feeder Flout Bridge do George Hannah 1 do 38 00 38 0 Freder Flout Bridge do John Henderson 1 do 38 00 38 0 Fort Maitland Lock do Micheal Corcoran 1 do 38 00 38 0 do Asst. Lock do Wm. Brennan 1 do 38 00 38 0										
do Asst. Lock do Lewis Mosier 1 do 38 00 38 0 do Guard Lock do Aaron Higgins 1 do 38 00 38 0 Goreman on Banks, Feeder Div do John Gearin 1 do 38 00 38 0 Overseer do John E. Scott 1 do 38 00 38 0 Feeder Flout Bridge do George Hannah 1 do 38 00 38 0 Stromness' Bridge do George Harrist 1 do 38 00 38 0 Port Mattland Lock do Micheal Corcoran 1 do 38 00 38 0 do Asst. Lock do Wm. Brennan 1 do 38 00 38 0										
do Guard Lock do Aaron Higgins 1 do 38 00 38 0 do Asst. Guard Lock do Oscar Upper 1 do 38 00 38 0 Foreman on Banks, Feeder Div do John Gearin 1 do 38 00 38 0 Overseer do John E. Scott 1 do 800 per an 66 6 Feeder Flout Bridge do George Hannah 1 do 10 00 10 Stromness' Bridge do George Harrist 1 do 38 00 38 0 Port Maitland Lock do Micheal Corcoran 1 do 38 00 38 0 do Asst. Lock do Wm. Brennan 1 do 38 00 38 0										
do	do Guard Lock									
Toreman on Banks, Feeder Div do John Gearin	do Asst. Guard Lock	do	•••••	Oscar Upper	1 d					
Overseer	Foreman on Banks, Feeder Div		•••••	John Gearin	1 d	o	38	00		
Transition Lock)verseer				1 d	o	800 per	an.	66 (67
Stromness' Bridge do George Harrist					1 d	ο	38	00	38 (00
Port Maitland Lock do										
do Asst. Lock do Wm. Brennan 1 do 38 00 38 0										
					·					
28 00 38 00										
	achient or mater, deci, bulliville	اسا	•••••	Charles Hush	լ և ա	···	38	v	38 (JU

Accounts Chargeable to Old Welland and Feeder Canal Staff and Working Expenses.

Date.	Nature of Work.	\$ cts.	\$ cts.
1886.			
Aug. 31	To G. N. W. Telegraph Co., Dunaville—Telegrams from 1st July, 1886, to 30th August, 1886		3 56
July 31	To William Chelew, St. Catharines-28 gals. coal oil, at 23c		6 44
A ug. 31	To Dunnville Electric Light Co., Dunnville—62 lightings for new swing bridge and old bridge at Guard Lock, at 12½c		7 75
	Total	-	17,75

PAY LIST in duplicate of persons emyloyed on the Welland Canal during the month of September, 1886, to pay permanent establishment and accounts, chargeable to Staff and Working Expenses.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Super- annuation
Superintendent PaymasterAccountant	do	William Ellis R. D. Dunn J. E. Lawrence	1 do	\$ cts. 2,900 00 1,400 00 1,000 00	\$ cts. 241 66 116 66 83 34	\$ ets. 14 50 7 00
Harbor Masters.		1			-	
Port Dalhousie Port Colborne		Wm. Cook C. H Carter		750 00 750 00	62 50 62 50	3 75 3 75
Overseers.		1				
Division No. 1do No. 2	do	T D. 11	1 3 -	100 00 75 00	100 00 75 00	6 00
do No. 3do No. 4	do	A TT 47.	1 do	60 00	60 00 65 00	3 20
Storekeeper, &c Messenger, &c In charge of iron and steel	do	W. W. Wait Thos. J. Hartley			65 00 37 50	
bridges, also steam pump,		W. Chatfield	1 month	75 90	75 90	
Division No. 1.	} .		1	1	1	
Ferryman, Port Dalhousie Master, Lock 1	d o	J. M. Woodall	1 month	42 00	36 40 42 00	1 58
Assistantdodo	do	Geo. Howe John Paxton Thos. Williams	1 do	45 00 45 00 45 00	45 00 45 00 45 00	1 69 1 69
Master, Bridge 1	do	Frank Darby P. Ohneath	1 do	45 00 45 00	45 00 45 00	
Master, Lock 2	do	Alph. Kelley Geo. Bowman	1 do	47 00 45 00	47 00 45 00	
do	do	B. Merritt R. Hutton	1 do	45 00 45 00	45 90 45 00	<u> </u>
Master, Lock 3 Assistantdo	do	J. Johnston	1 do		47 00 45 00	1.00
do do Master, Bridge 2	do	Jas. Grogan John Flynn	1 do	45 00	45 00 45 00 45 00	1.69
Assistant	do :	H. Alexander, 99	1 do	45 00	45 00	1

PAY LIST in duplicate of Persons employed on the Welland Canal, &c.—Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Super- annua tion
Division No. 1—Con.				\$ cts.	\$ cts.	\$ cts.
Master Lock 4	Sept., 1886	J. Franklin	1 month	47 00	47 00	
Assistant	do	S. Hopkins	1 do	45 00 4 5 00	45 00 45 00	
do ' do '	do	T TTT 1 11		45 00 45 00	45 00	
Master Lock 5	do	In a		47 00	47 00	
Assistant	do	T TO .		45 00	45 00	İ
do	do			45 0 0	45 00	
do	do	J. Wilde		45 00 45 00	45 00 45 00	
Master Bridge 3 Assistant	do	. G. H. Browmen M. Morarity	l do	45 0 0	45 00	
Master Lock 6	do		1 do	47 00	47 00	ļ
Assistant.	do	J. Daley		45 00	45 00	
do		. Chas. Sabine		45 00	45 00	
Moston Pridate K	do	777 T0111: 44		45 00 45 00	45 00 45 00	1
Master Bridge 5 Assistant	do	Δ		45 00	45 00	1
Master Lock 7	do	10 D ft	1 do	47 00	47 00	1 77
Assistant	do	. M. Sullivan	1 do	45 00	45 00	1
do	do			45 00	45 00 45 00	1.00
Mastar Pridas 6	do			45 00 45 00	45 00	1 69
Master Bridge 6 Assistant.		A. Stewart		45 00	45 00	1
Master Lock 8	do	N TI - Jan		47 00	47 00	
Assistant.	do	. Wm. Reid	1 do	45 00	45 00	ì
do	do			45 00	45 00	1
do	do			45 00 47 00	45 00	1
Master Lock 9	do	R. H. Watson Alex. Soper		45 00	47 00 45 00	1
Assistant do	do	m ~ r ^ 1		45 00	45 00	1
do	1 7	1 A D 34		45 00	45 00	}
Master Bridge 7	do	.J. Whitten		45 00	45 00	
Assistant		J. Cushman		45 00 47 00	45 00	1377
Master Lock 10	do	.'J. Bradley . J. Mulvey		45 00	45 00	1,69
do		H. Hare		45 00	45 00	1,69
do		.T. Wilson	l do	45 00	45 00	
Master Bridge 8				45 00	45 00	
Assistant Master Lock 11				45 00 47 00	45 00 47 00	
Assistant.		J. Reynolds A. Wilson	10 -	47 00	47 00	1,69
do		J. Webster		47 00	47 00	
do		W. P. Burleigh		47 00	47 CO	
Master Lock 12				47 00 45 00	47 00	1_77
Assistantdo		E. Bradley F. Mughan		45 00	45 00	1
do	1 -	J. McBride		45 00	45 00	ŀ
Master Lock 13	do .	PR 77		47 00	47 00	ļ
Assistant	do .	J. Turner		45 00	45 00	[
do	1 2.	J. A. Bradley		45 00	45 00 45 00	
do	do .	G. Milliward	. 1 do	45 00	45 00	İ
Division No. 2.	1	I Taba Classic	, ,,	45.00	45 90	
Master, Bridge 9 Assistant		John Clarke John Black	1 3 -	45 00 45 00	45 00	
Master, Lock 14		Con. Nestor		47 00	47 00	
Assistant	do .	. J. Winton	. 1 do	45 00	45 00	
do	do .	J. Strong	. 1 do •••		45 00	
do		T. Flynn		45 00 47 00	45 00	
Master, Lock 15		J. Aikens J. McAuley		45 00	47 00 45 00	
do		W. J. Wilson		4 2 00	45 00	
do	do	A. Boyle		45 00	45 00	1
Master, Lock 16		. T. Burley		47 00	47 CO	1

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c .- Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Super- annuation
Division No. 2-Con.				\$ cts.	\$ cts.	\$ cts_
Assistant	Sept., 1886	S. Bradley	1 month	45 00	45 00	
do	do	J. Holland	1 do	45 00 45 00	45 00 45 00	1.00
Master, Lock 17	do	M. Coody		47 00	47 00	1 69
Assistant	do	TR C1	i do	45 00	45 00	ł
do	do	M. Dooher	1 do	45 00	45 00	Į.
Master, Leck 18	do		1 3.	45 00 47 00	45 00 47 00	
Assistant	do	C 37 .		45 00	45 00	1
do	do	T. Hanna		45 00	45 00	l
do		G. Cook	1 do	45 00	45 00	1
Master, Lock 19 Assistant	do	R Grisdale		47 00	47 00	}
do		F. Johnson J. J. Duffy	l do	45 00 45 00	45 00 45 00	1
do		F. Hoschke	1 do	45 0 0	45 00	
Master, Lock 20	do	J. Renter	1 do	47 00	47 00	1
Assistantdo		I. McMahon		45 00	45 00	1 69
dodo	do	J. Collins T. Freel	l do	45 00 45 00	45 00 45 00	1 69
Master, Lock 21	do	F. C. Berriman	1 do	47 00	47 00	1
Assistant	do	John Cole	1 do	45 00	45 00	•
do		J. Ellis		45 00	45 00	
Master, Lock 22	3.	A. Clark Wm. Hanna	1 do	45 00 47 00	45 00 47 00	
Assistant	do	Wm. Boyle		45 00	45 00	l
do	do	Patk. McNamara	1 do	45 00	45 00	1 69
Monton Look 92		Hy. Phillips	1 3 1	45 00	45 00	•
Master, Lock 23 Assistant	do do	T. Bonewell I. Smerdon	l do	47 00 45 00	47 00 45 00	•
do	do	T. Commarford	1 do	45 00	45 00	1 69
do		J. Corbett		45 00	45 00	1 69
Master, Lock 24		R. Campbell		47 00	47 00	
Assistantdo		M. Henderson	l do	45 00 45 00	45 00 45 00	ţ
dodo	do	T. Bradley Hy. Kern		45 00	45 00	1
Master, Bridge 10		Wm. Fleming	l do	45 00	45 00	1
Assistant	do	F. Galbraith	1 do	45 00	45 00	
Master, Lock 25		M. McCarthy		47 00	47 00	1 77
Assistantdo	do do	G. Detlor S. Campbell	1 do	45 00 45 00	45 00 45 00	ļ
do	do	R. Wright	1 do	45 00	45 00	}
Master, Bridge 12	do		1 do	45 00	45 00	j
Assistant		R. Camp		45 00	45 00	1
Master, Guard Lock		C. H. Collier Sam. Frazer		42 00 45 00	42 00 45 00	1 58
do		Fred. Lay	1 do	45 00	45 00	1 69
_ do		Jas. Cook		45 00	45 00	1
Master, Bridge 13		R. Higgins		45 0 0	45 00	1 69
Assistant	do	Wm. Upper	1 do	45 00	45 00	
Division No. 3.						
Master, Bridge 14	Sept., 1886	D. O'Leary	1 month	45 00	45 00	1 69
Assistant	do	Geo. A. Upper	1 do	40 00	40 00	1
Master, Bridge 15	do	B. O'Leary	1 do	45 00	45 00	1 69
Assistant Port Robinson Ferry		G. Thompson R. Stevenson	1, 3. 1	45 00	45 00	1 69
do Lock		Jas. McCoppen		30 00 47 00	30 00 47 00	1 77
Assistant	l do	Jas. Walsh	i do	45 00	45 00	1 69
Master, Bridge 16	do	Jas. Edmonds	1 do	45 00	45 00	1 69
Assistant	l do	Geo. P. Misner	'l do'	45 00	45 00	1

PAY-LIST in duplicate of Persons employed on the Welland Canal, &v--Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Super- annuation	
Division No. 4.				\$ cts.	\$ cts.	\$ cts.	
Welland Lock	do do do do do do do do do do do do do do do do do do	Jas. Foster L. J. Brennan Chas. Hanna Richard Hanna M. Traynor E. Bonaberg T. Shisler J. Henshaw J. Cook J. Stevens W. Aikens J. Dunlap J. Dunlap J. Dunlap E. Bradley Los McMurrey Jas. Nixon Wm. Nixon	1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 2 do 3 do 3 do 30 do 30 do 30 do	1 50 1 50 1 50	45 00 45 00 45 00 45 00 30 00 45 00 45 00 42 00 42 00 42 00 42 00 42 00 42 00 42 00 43 00 44 00 45 00 45 00 45 00	1 69 1 69 1 69 1 69 1 58 1 58 1 58 1 58	
MACHINISTS. Division No. 1. Keeping machinery connected with lock gates and water weirs in proper order throughout Division No. 1. Division No. 2. Keeping machinery connected with lock gates and water weirs in proper order throughout Division No. 2. Diver	Sept., 1886 do do Sept., 1886 do	Jno. Marshall Sam. Houston E. Newall, H. & Wg V. Mann T. Ryan J. H. Booth, H. & Wg	5 days 25 do 25 do 28 days 28 do	2 25 2 00 1 50 2 00 1 75	11 25 50 00 37 50 56 00 49 00 42 00 46 00		
					8,253 31	103 74	

Accounts chargeable to Welland Canal Staff and Working Expenses.

Date.		Nature of Work.	\$ cts.	\$	cts.
18	386.		į		-
Sept.	1-30	Fo G. N. W. Telegraph Co., St. Catharines—Telegrams during			
do	1-30	G. N. W. Telegraph Co., Port Dalhousie—Telegrams		16	57
do	1-30	during month		1	08
	1	month		1	00 °.
do	1-30	Bell Telephone Co., Welland—Telephone service during month		9	15.
do	1-30	Bell Telephone Co., Port Colborne—Telephone service, 3 months ending Sept. 30, 1886		5	75
do	1-30	C. P. R. Telegraph Co., St. Catharines—Telegrams during			06
do	1-30	The Journal Printing Co., St. Catharines—Advertising list of vessels passing through Welland Canal, 255			00
do	1-30	words, at 4c			20:
do	30	L. G. Carter, Port Colborne—Postage stamps, 3 months	1		18
July	6 to	ending Sept. 30, 1886		7	12
Sep	ot. 30	John Junkin & Co., St. Catharines— 2 cases matches, at \$5, \$10; 8 doz. chimneys, at \$1 50,			
	l	\$12	22 00		
	ł	6 doz. chimneys, at \$1.20, \$7.20; 4 doz. large burners, at \$2.50, \$10	17 20		
	1	4 doz. M. burners, at \$2, \$8; 2 gross lampwicks, \$1.75 4 doz. brooms, at \$3, \$12; 10 lantern burners, \$1.80	9 75 13 80		
	j	1 duster, 80c.; 1 counter brush, 45c.	1 25	QA.	00
OA	70	TV Cl. 1 C. C. d. 1			
Sept. do	30 1–30	Wm. Chelm, St. Catharines—171 galls. coal oil	13 60	39	33:
	- 1	3 boxes matches, 38c.; lamp wick, 6c	0 44	14	04
do	1-30	John Mathews, Port Colborne— 30 galls. coal oil, at 30c, \$9; 2 burners, 80c 1 oil can, 20c.; 2 deck brooms, 60c.; wick, 2c	9 80 0 82		
do	1-30	Wm. Pike, Thorold-		10	62 .
	1	2,510 lbs. coal, at \$6.25 per ton	7 83 28 89		
	}	10,050 do 5.75 do		36	72
do	1-30	Hill & Sons, Port Robinson-2 cords hard wood			00-
Aug. Sept.		D. D'Evarde, Registrar, Welland—Searches and description J. G. Currie, Registrar, St. Catharines—Copy of descrip-		4	23
do	1-30	tion deed, Bradley to Crown		1	00
	1	ders' wages, St. Catharines and Thorold Railway Bridges across canal, 1 month each, at \$45		360	00
do	30	J. G. Demare, Overseer, Division 1, Port Dalhousie—Use of horse and waggon, 3 months ending Sept. 30, 1886,	i		-
D4		in connection with duties as overseer, at \$150 per ann.		37	50
Sept.	30	James Dell, Overseer, Division No. 2, Thorold— 3 months' house rent, at \$8	24 00		
	1	Use of horse and waggon 3 months ending 30th Sept., 1886, in connection with duties of Overseer, at \$50			
		per annum	37 50	61	50
do	30	A. Hamilton, Overseer, Division No. 3, Port Robinson-			
	ĺ	3 months' house rent, at \$8 Postage, 60 cts.; railway fares, \$1.40	24 00 2 00		
	i	103		26	00

Accounts chargeable to Welland Canal, Staff and Working Expenses - Concluded.

Date.	Nature of Work.	Amount.	Total.	
July 1-31 Aug) 1-31 Sept, 1-30 Sept. 30 Sept. 1-30	Thos. R. Secord, Overseer, Division No. 4, Port Colborne— 15 railway fares, Welland and returning, at 45 cts 4 do Air Line do 20 cts 16 do Welland do 45 cts 7 do Air Line do 20 cts 18 do Welland do 45 cts 5 do Air Line do 20 cts W. W. Waits, St. Catharines—Use of horse and waggon delivering oil and stone along canal A. Thompson, Welland—47 weeks' board and lodging for		\$ cts. 25 45	
Sept. 18 do 20 do 21 do 22-23 do 29 do 18-29 do 30		17 14 2 75	17 14 19 55 81 10 893 29	

PAY LIST in duplicate of Persons employed on the Old Welland and Feeder Canal during the month of September, 1836, to pay Permanent Establishment and account chargeable to Staff and Working Expenses.

Capacity.	When Employe	d	Names.	Т	ime.		Rate.	Amount.	Super- annuation
		-				_	\$ cts.	\$ cts.	\$ cts.
Overseer	Sept., 188	36	Jno. B. Smith		mont	h	100 00	100 00	6 00
Master, lock 1 and bridge.			Sam. Duffin	1	do		42 00	42 00	1 58
Assistant			Wm. Smith	1	do	•••	42 00	42 00	1 58
do			Robt. Edgraft	1	do		42 00	. 42 00	1 58
do			John House	1	do		42 0 0	42 00	
Master, lock 21 and bridge.			W. Weaver	1	do		42 00	42 00	1 58
Assistant			J. Johnson	1	dо		42 00	42 00	1 58
do			W. H. Charles	1	do		42 00	42 00	1 58
do			John Sullivan	1	do		42 00	42 00	1 58
St. Paul Street Bridge			Wm. McClorey	1	do		3 8 0 0	38 00	1 43
Assistant			Tim. Sullivan	1	đо		38 00	38 00	1 43
Master, lock No. 3			Alex. Walker	1	do		38 00	38 00	1 43
Assistant			Fred. Sherer	1	do		38 00	38 00	1 43
Master, lock 4 and bridge			J. Levingstone			•••	42 00	42 00	
Assistant			Jas. Boyle	1			42 00	42 00	1 58
Master, locks 5, 6, 7, and bd			Robert Boyle	1			42 00	42 00	1 58
Assistant			M White	1	do		42 00	42 00	1 58
Mas er, locks 8, 9, 10 and 11			B. Clark	1	do	•••	38 00	38 00	1 43
Assistant	do .	•••	C. D. Bradley	1	do	•••	38 00	38 00	1 43
Master, locks 12, 13, 14, 15,	i <u>.</u>					- 1			1 43
and bridge			Jas. Cogan	1	do		38 00	38 00	1 43
Assistant			M. Nestor	1	do		38 00	38 00	1 43
Master, locks 16, 17, 18			B. Darby			•••	38 00	38 00	1 43
Assistant			R. Gibson		•	•••	38 00	38 00	1 43
Master, locks 19, 20, 21			E. McLaughlin		•		38 00 38 00	38 00 38 00	1 43
Assistant	do .	•••	Robert Bradley	1	do		35 00	30 00	1 43
Master, lock 22 and Keefer's	do .		John McNamara	1	do		38 00	38 00	1 43
bridge			A. W. Bradley	i	•		38 00	38 00	1 43
Assistant Master, locks 23, 24 and bd			John Neil	i	•		42 00	42 00	1 58
			D. Rickman	î	do		38 00	38 00	1 43
Assistant			John Fluellan	î	do		38 00	38 00	1 43
			R Swazze	ī	do		38 00	38 00	1 43
Assistant	do	•••	Jacob Renter	ī	do		38 00	38 00	1 43
H urst's Bridge M arlatt's do	1 -		Nelson Higgins	î	do		38 00	38 00	1 43
Allanburgh Bridge			A. H. Upper	١ _	do		38 00	38 00	1 43
do Lock	1 -		Wm. Higgins	ī	do		38 00	38 00	over 35 yrs
do Asst Lock			Lewis Mosier	1	do		38 00	38 00	1 43
do Guard Lock			Aaron Higgins	1	do	•••	38 00	38 00	over 35 yrs
Assistant		•••	Oscar Upper		do		38 00	38 00	
Foreman on banks	do	•••	John Gearin	1	do	•••	38 00	38 00	1 43
Feeder Division.								1	
Overseer	do d		John E. Scott	1	do		800 per an	. 66 66	4 00
Junction Lock			George Hannah		do	•••	38 00	38 00	1 43
Feeder, Float Bridge			John Henderson		do	•••	10 00	10 00	
Stromness do			George Harris		do	•••	38 00	38 00	1 43
Port Maitland Lock			M. Corcoran		do			38 00	1 43
do Asst. Lock.			M. Brennan	_	do	•••	1 00 00	38 00	
Reg. of water at Dunnville			Chas. Thrush		do	•••	38 00	38 00	over 35 yr
<u>-</u>								1,862 66	61 70

Accounts chargeable to Old Welland and Feeder Canal Staff and Working Expenses.

Date.		Nature of Work.	\$	cts.	\$	cts.
Sept	1–30	To John B. Smith, Overseer, Merritton— 3 months' house rent, at \$8 Use of horse and waggon for 3 months ending 30th Septem-		00		
		ber, 1886, in connection with duties of overseer, at \$150 per annum	37	50		
July	1-31	To John E. Scott, Overseer, Dunnville— Horse and buggy to Marshville, 3 days, at \$1.50	5 4 4 3 2	50 00 00 50 75 00		31 5 0 ∙
		\$1.50 do Port Maitland, 2 days, at \$1.25	2	00 50		
Sept.	1-21	do Junction, 1 day To F. R. Labor, Dunnville, 55 galls. coal oil, at 22c To Dunnville Electric Light Co., Dunnville, lighting 2 swing	2	00		4 25 12 10
Bept.	1-00	bridges, 60 lights				7 50
		Total			1	15 35

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of October, 1886, to pay permanent establishment, and account chargeable to staff and working expenses.

Capacity.	When Employed			Rate.	Amount.
Superintendent	do do	Wm. Ellis	1 do	1,000	\$ cts. 241 67 116 67 83 33 62 50 62 50
Overseers— Division No. 1	do do do do	J. G. Demare	1 do 1 do 1 do 1 do 31 days	75 00 60 00 65 00 65 00 1 25	100 00- 75 00- 60 00 65 00- 65 00- 38 75- 75 00-
Division No. 1. Ferryman Master, Lock 1 Assistant do do Master, Bridge 1 Assistant Master, Lock 2	do do do do do do	Frank Smith	1 month 1 do 1 do 1 do 1 do 1 do 1 do	42 00 45 00 45 00 45 00 45 00 45 00	36 40 42 00 45 00 45 00 45 00 45 00 45 00 47 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c .- Continued.

Capacity.	When	Namas	Time	Data	Amount
Capacity.	Employed	Names.	Time.	Rate.	Amount.
Aivision No. 1-Con.				\$ cts.	\$ cts.
Assistant.	October	Geo. Bowman		45 00	45 00
dodo	do	B. Merritt		45 00 45 00	45 00 45 00
Master, Lock 3		J. Johnston		47 00	47 00
Assistant	do	Jas. Keys	1 do	45 00	45 00
do	do	Con. Gorman	1 do	45 00	45 00
do		Jas. Grogan	1 do	45 00	45 00
Master, Bridge 2	do	Jno. Flynn H. Alexander	1 3	45 00	45 00
Master, Lock 4	do	Jos. Franklin	l do	45 00 47 00	45 00 47 00
Assistant	do	Sam. Hopkins	1 do	45 00	45 00
do	do	Wm. Altoff	1 do	45 00	45 00
do		John Woodall	1 do	45 00	45 00
Master, Lock 5	do	Thos. Scott	1 do	47 00	47 00
Assistantdo		J. Pennington		45 00 45 00	45 00 45 00
do	do	John Wilde	1 do	45 00 45 00	45 00
Master, Bridge 3	do		1 do	45 00	45 00
· Assistant	do	M Morarity	1 do	45 00	45 00
Master, Lock 6		Peter Paxton	1 do	47 00	47 00
Assistantdo	do	John Daley	1 do	45 00	45 00
dodo		Chas. Newbold Chas. Sabine	1 3	45 00 45 00	45 00 45 00
Master, Bridge 5	do	TTY Trees	1 do	45 00	45 00
Assistant	do	Geo. Spooner	1 do	45 00	45 00
Master, Lock 7	do	C. B. Hare		47 00	47 00
Assistantdo		M. Sullivan	1 do	45 00	45 00
do		R. Freeman	1 3 1	45 00 45 00	45 00 45 00
Master, Bridge 6	do	Jas. Grant	1 do	45 00	45 00·
Assistant	do	Alex. Stewart	1 do	45 00	45 00
Master, Lock 8		Nich Hayden	1 do	47 00	47 00
Assistant			1 do	45 00	45 00
do		R. Secord	l do	45 00	45 00 45 00
Master, Lock 9		R. H. Watson	1 do	45 00 *47 00	47 00
Assistant		Alex. Soper		45 00	45 00
do		Jos. C. Longley		45 00	45 00
do	do	Alex Bradt	1	45 00	45 00
Master, Bridge 7	do	James Whitten	1 do	45 00	45 00
Assistant		John Cushman		45 00	45 00 47 00
Assistant			l do	47 00 45 00	45 00
do		Hy. Hare	1 do	45 00	45 00
do	do	Thos. Nelson	1 do	45 00	45 00
Master, Bridge 8				45 00	45 00
Assistant Master, Lock 11		John McGeachie Jas. Revnolds		45 00 47 00	45 00 47 00
Assistant	do	1	1 do	45 00	45 00
do	do	W. P. Burleigh	1 do	45 00	45 00
do	do	Jas. Webster	1 do	45 00	45 00
Master, Lock 12	do	Wm. Strong	1 do	47 00	47 00
do	do	E. Bradley F. Mughan	1 2 -	45 00	45 00
do		Jas. McBride	1 1	45 00 45 00	45 00·
Master, Lock 13		Thos. Keating	1 do	47 00	47 00
Assistant	do	Jos. Turner	1 do	45 00	45 00
do		Jas. A. Bradley	1 do	45 00	45 00
do	. do	Geo. Milliward	1 do	45 00	45 00
Division No. 2.	-				
Master, Bridge 9		John Clarke		45 00	45 00
Assistant	. do	John Black	.¹ 1 do	45 00	45 00
		107			

PAY-LIST in duplicate of Persons employed on the Welland Canal-Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Division No. 2.				\$ cts.	\$ cts.
Master, Lock 14	October	Con. Nestor	1 month	47 00	47 00
Assistant	do	Jas. Winton	1 do	45 00	45 00
dodo		John Strong	1 do	45 00 45 00	45 00 45 00
Master, Lock 15	do	Thos. Flynn	1 do	47 00	47 00
Assistant	do	Jas. McAuley	1 do	45 00	45 00
do	do	W. J. Wilson	1 do	45 00	45 00
do	do	Robt. Boyle	1 do	45 00 47 00	45 00 47 00
Assistant	do	Thos. Burley	1 do	45 00	45 00
do	do	Austin Moran	1 do	45 00	45 00
do	do	John Holland	1 do	45 00	45 00
Master, Lock 17		Michael Coody	1 do	47 00	47 00 45 00
do	do	J. Shennan Michael Dooher	1 do	45 00 45 00	45 00
do	do	Michael Glynn	î do	45 00	45 00
Master, Lock 18	do	J. H. Pierson	1 do	47 00	47 00
Assistantdo	do	Geo. Newton	1 do	45 00 45 00	45 00
do	do	Thos. Hanna	1 do	45 00	45 00 45 00
Master, Lock 19	do	R. Grisdale	î do	47 00	47 00
Assistant		F. Johnson	1 do	45 00	45 00
do	do	F. Hoschke	1 do	45 00	45 00
do Master, Lock 20	do	J. J. Duffy Jacob Renter	1 do	45 00 47 00	45 00 47 00
Assistant	do	Isaac McMann	1 do	45 00	45 00
do		John Collins	1 do	45 00	45 00
_ do	do	Thos. Freel	1 do	45 00	45 00
Master, Lock 21	do	F. C. Berriman	1 do	47 00	47 00
Assistantdo	do	John Cole James Ellis	1 do	45 00 45 00	45 00 45 00
do	do	Adelbert Clarke	1 do	45 00	45 00
Master, Lock 22.	do	Wm. Hanna	1 do	47 00	47 00
Assistant	do	P. McNamarra	1 do	45 00	45 00
dodo	do	Henry Phillips	1 do 1 do	45 00 45 00	45 00 45 00
Master, Lock 23	do	Wm. Boyle Thos. Bonewell	1 do	47 00	47 00
Assistant	do	Jas. Smerdon	1 do	45 00	45 00
do	do	John Corbett	1 do	45 00	45 90
Master, Lock 24	do	T. Commanford R. Campbell	1 do 1 do	45 00 47 00	45 00
Assistant		M. Henderson	1 do	45 00	47 00 45 00
do	do	Thos. Bradley	1 do	45 00	45 00
do		Henry Kern	1 do	45 00	45 00
Master, Bridge 10		F. Guloraith Wm. Fleming	1 do	45 00 45 00	45 00
Master, Lock 25.		M. McCarthey	1 do	47 00	45 00 47 00
Assistant		Geo. Deller	1 do	45 00	45 00
do	do	Samuel Campbell		45 00	45 00
Master, Bridge 12	do	Robert Wright	1 do	45 00	45 00
Assistant	do	Geo. A. Thomas Robert Camp	1 do	45 00 45 00	45 00 45 00
Master, Guard Lock	do	C. H. Collier		42 00	42 00
Assistant	do	Sam Fraser	1 do	45 00	45 00
dodo	1 -	Fred. Lay	1	45 00	45 60
Master, Bridge 13		James Cook		45 00 45 00	45 00 45 00
Assistant		Wm. Upper		45 00	45 00
Division No. 3.					
Master, Bridge 14		Dan O'Leary	1 month	45 00	45 00
Assistant	. do	Geo. A. Upper	1 do		40 00
Master, Bridge 15	.] do	Bart. O'Leary	11 do	45 00	45 00

Pay-List in duplicate of Persons employed on the Welland Canal-Continued.

			<u> </u>							-
Capacity.		When Employed	Name	s.	Tim	ie.	Rate		Amoun	t.
Division No. 3-Con.							\$ (ets.	\$	cts.
Assistant		October	Geo. Thomps	son	1 mo	nth	45	00	45	00
Port Robinson Ferry		₫o	R. Stevensor	1	1 de		30		30	
do Lock		do	James McCo	ppin	1 do		47		47	
Assistant		do	James Walsh James Edmo	1	1 do		45 4 5		45 45	
Master, Bridge 16	••••	do	Geo. P. Miss	nas	1 de		45		45 45	
A DDIO GII L	••••		G 00. 1. Mis			` '''	10		20	• •
Division No. 4.								- 1		
Welland Lock	••••	October	William Wil	son	1 mo	nth	45	00	45	00
Master, Bridge 17	••••	do	James Foste	r	1 de	o	45			00 ·
Assistant	••••		Luke J. Bre		1 d		45			00
Master, Bridge 19		do	Chas Hann	ah	1 d		45			00
Assistant	••••		Alex. Hanna Michael Tra		1 de		45 30			00
Master, Bridge 21	••••	do	Emel Boneb				45			00
Assistant	••••	do	Isaac Shisler	·	i d	-		00		00
Port Colborne Lock and Bridg	e		John Hensh				42			00
do do	•••		John Cook .				42			00
do do	•••		John Steven					00		00
do do	•••		Wm. Aikens			o		00		00
do do	•••	do	Jas. Dunlap	••••••	1 d			00		00
do Ferry	o fo		John Bradle					00 50		00
Signalling and controlling a passage of vessels through Aqueduct at Welland, night a day.	Old		Joseph McM	urray	or da	ys	1	50	40	
do do	•••	do	Robert Simp	son	31 d	o	. 1	50	46	50
do do	•••	do	James Nixo	ı	31 d	o		50		50
do do	•••	do	William Niz	on	31 d	0	1	50	46	50
Machinists.		ļ				!				
Division No. 1.										
Keeping machinery connect with Lock Gates and Wa Weirs in proper order throu	ıste	1	John Marsh	all	9½da	ys	2	25	21	37
out. do do		do	Sam Housto	n	22 1 d	0	,	00	45	00
do d o	•••		Ed. Newall,					50		00
	•••	"" "	waggon.		- "		-			
Division No. 2.										
Keeping machinery connect with Lock Gates and Waw Weirs in proper order throught.	aste	o)	Volney Man	n	27½ d	lo	2	00	55	00.
do do		do	. Thomas Ry	an	271 d	0	1	75	48	12
do do	•••	do	. J. H. Boo	th, horse	27 d	lo		50		25
-			and wags	zon.	Į.				1	
Diver	••••	do	E. Smiley.	•••••	24½ d	o	2	00	49	00
		1	1 .]]		8,259	56
		1			1				1 0,200	, ,,
							•			

D	ate.	Nature of Work.	Amount.	Total.
1	886		\$ cts.	₽ ota
Oct.	1-31	To G. N.W. Telegraph Co., St. Catharines-Telegrams during	Ф Сьз.	\$ cts
do	31	G. N. W. Telegraph Co., Welland—Telegrams from Jan.		6 43
do	31	15 to Oct. 31, 1888 Bell Telephone Co., St. Catharines—		11 02
uo	31	1 year's rent 4 sets telephone, at \$35	140 00	
		1 do 3 extension bells, at \$3	9 00 1 50	
		Communications Sept. and Oct	2 30	150.00
do	31	John Cloy, Lock 25, new canal-Telephone communica-		152 80
do	1-31	tions from April 24 to Oct. 1		5 85
		month		15 05
·do	1–31	Bell Telephone Co., Port Colborne— ½ year's rent of instrument, \$25	12 50	
		Communications during month	7 85	
·do	1-31	B. C. Fairfield, St. Catharines—Post cards and stamps		20 35 8 30
do	31	Geo. Burgar, Welland P. O.—Postage stamps		1 20
do	31	Journat Printing Co., St. Catharines—Advertising list of vessels passing through Welland Canal, 205, at 4 cts		8 20
Oct.	1-31	W. N. Garden, Welland-	i	
		39 gals. coal oil, at 30c., \$11.70; lamp wick, 3c	1 06	
à	1 21	1 doz. lamp chimneys	1 00	19 70
do	1-31	John Mathews, Port Colborne— 29 gals. coal oil, at 30c., \$8.70; 3 chimneys, 30c	9 00	13 79
d.	91	1 gal. lard oil, 80c.; ½ cord wood, \$2.50 Thos. R. Secord, Port Colborne—Allowance for doing	3 30	19.20
do	31	Harbor Master's duties at Port Colborne while Harbor		12 30
		Master was away passing vessels through old aqueduct at Welland, during the months of August, September		
		and October, at \$20		60 00
·do	31 31	Richard Leeson, Merritton—19 cords hard wood, at \$5.50 John Gutter, St. Catharines—12 tons nut coal, at \$6.25		104 50 75 00
·ďo	31	Wm. Pike, Thorold—	i	
		2,565 lbs. nut coal, at \$6.00 per ton	7 70 8 10	
4.	1-31	•		15 80
do	1-31	Grand Trunk Railway Co, St. Catharines—1 mos. time for 8 railway bridge tenders, at \$45 each		360 00
·do	1–31	W. W. Wait, St. Catharines—Use of horse and waggon delivering stores, &c., along line of Canal		20.00
do	31	A. Thompson, Welland-4? weeks' board and lodging for	1	20 00
		C. H. Carter, in charge of aqueduct at Welland, at \$4 R. D. Dunn, Paymaster, St. Catharines—		17 72
do	18	Horse and buggy to Port Dalhousie, 1 day		
do	19	do Thorold, Allanburgh and Port Rob- inson		
do	19	Expenses of assistant and horse feed	1 00 1	
do	20 21-22	Railway fare and hack hire, Welland and return do do Port Colborne and Dunnville	1 40 2 60	
do	17-23	3 days' board and lodging, self, along line of canal,	1	
do	31	R. A. Abbey, Port Robinson—	9 00	19 00
		12 gals. coal oil, at 30c., \$3.60; 1 splint broom, 50c	4 10	
		Telegrams from January 1st, 1886, to date	0 50 1 81	
do	31	Bell Telephone Co., St. Catharines—1 year's rent of tele-		6 4
		phone, &c., at head lock, Allanburgh and Welland, to September 14, 1887 (including erection of poles and		
		wires specially for this service)		200 0
		1	i .	\$1,133 7

PAY-LIST in duplicate of Persons employed on the Old Welland and Feeder Canal during the month of October, 1886, to pay Permanent Establishments, chargeable to Staff and Working Expenses.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
		F.1. D.C		\$ cts.	\$ cts
Overseer		John B. Smyth	i month	100 00	100 00
Master, Lock 1 and Bridge	do	Sam. Duffin	l do	42 00	42:00
Assistantdo	do	Wm. L. Smith R. Engraft		42 00 42 00	42 00 42 00
do		John House		42 00	42 00
Master, Lock 2 and Bridge		Walter Weaver	1 do	42 00 (42 00
Assistant	do	J. Johnson	1 do	42 00	42 00
do	do	Wm. H. Charles	i do	42 00	42 00
do	do	John Sullivan	1 do	42 00	42 00
St. Paul Street Bridge	do	Wm. McClorey		38 00	38 00
Assistant	do	Tim. Sullivan	1 do	38 00	38 00
Master, Lock 3	do	Alex. Walker	1 do	38 00	38 00
Assistant	l do	Fred Sherer	1 do	38 00	38 00
Master, Lock 4 and Bridge		James Livingston		42 00	42 00
Assistant		James Boyle		42 00	42 00
Master, Locks 5, 6, 7 and Bridge		Michael White		42 00	42 00
Assistant		Robert Boyle		42 00	42 00
Master, Locks 8, 9, 10 and 11		B. Clarke	1 do	38 00	38 00
Assistant	do	C. W. Bradley	1 do	38 00	38 00
Master, Locks 12, 13, 14, 15 and	4.0	Tamas Gamas	l, , i	22.00	20.00
Bridge		James Cogan		38 00	38 00
Master, Locks 16, 17 and 18		Martin Nestor	[• 1.]	38 00	38 00
Assistant		B. Darby		38 00 1 38 00 1	38 00 3 8 00
Master, Locks 19, 20 and 21		E. McLaughlin		38 00	38 00
Assistant		Robert Bradley		38 00	38 00
Master, Lock 22 and Upper Bridge		John McNamara	1 do	38 00	38 00
Assistant	do	A. W. Bradley		38 00	38 00
Master, Locks 23, 24 and Bridge		John Neil		42 00	42 00
Assistant	do	D. Ryckman	1 do	38 00	38 00
Master, Lock 25 and Guard Lock		John Fluellyon		38 00	38 0 0
Assistant		Rufus Swazzie		38 00	3 8 00
Hurst's Bridge		Jacob Renter		38 00	38 00
Marlatts do		Nelson Higgins		38 00	38 00
Allanburg Bridge		A. H. Upper		38 00	38 00
do Lock		Wm. Higgins	1 do	38 00	38 00
Assistant	d o	Lewis Mosier	l do	38 00	38 00
Allanburgh Guard Lock		Aaron Higgins'	1	38 00	38 00
Assistant		Oscar Upper John Gearrin	' ء ۔ '	38 00	38 00
roteman on Danks	αυ	John Gearmi	1 do	38 00	38 00
Feeder Division.					
Overseer	do	John E. Scott	1 month	800 00	66 67
Junction Lock		G. W. Hannah		38 00	38 00
Feeder Flow Bridge		John Henderson		10 00	10 00
Stromness Bridge		Chev. Harris		38 00	38 00
Port Maitland Lock	do	Michael Corcoran		38 00	38 00
Assistant		Wm. Brennan	1 do	38 00	38 00
Regulating water at Dunnville	do	Chas. Brennan	1 do	38 00	38 00
					1,862 67

Accounts chargeable to Old Welland and Feeder Canal Staff and Working Expenses.

D	Date. Nature of Work.			nt.	Total	Total.		
18	886.		\$	cts.	\$	cts		
Oct. do	31 31			• • • • • • • • • • • • • • • • • • • •	41	25		
do	31	swing bridge and guard lock, at 16% cts	 .	••••••	10	00		
uo	31	G.N.W. Telegraph Co., Dunnville—Telegrams from Sept. 1, 1886, to date		•••••	10	06		
		Total		••••••	61	31		

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of November, 1886, to pay permanent establishment and accounts, chargeable to Staff and Working Expenses.

Capacity.	When Employ		Names.	Time.	Rate.	Amount.
SuperintendentPaymaster	1886. Novemb		William Ellis Richard D. Dunn	1 month 1 do	\$ cts. 2,900 00 1,400 00	\$ cts. 241 66 116 66
Accountant	do do do	•••	James E. Lawrence Wm. Cook C. H. Carter	1 do 1 do 1 do	1,000 00 750 00 750 00	83 34 62 50 62 50
do do No. 2 do do No. 3 do do No. 4	do do do do	•••	J. G. Demare	1 do 1 do	100 00 75 0 0 60 00 65 00	100 0 0 75 00 60 00 65 00
Storekeeper, &c	do do d o	•••	W. W. Wait Thos. J. Hartley W. Chatfield	30 days	65 00 125 00 75 00	65 00 37 50 75 00
Division No. 1.		•••			,,,	10 00
Port Dalhousie Ferry Master, Lock 1 Assistant do	do do do	•••	Frank Smith J. M. Woodall Geo. Howe J. Paxton	1 month	1 40 42 00 45 60 45 00	36 40 42 00 45 00
do	do do	•••	T. Williams	1 do	45 00 45 00 45 00	45 00 45 00 45 00 45 00
Master, Lock 2 Assistantdo	do do		B. Merritt	1 do	47 00 45 00 45 00	47 00 45 00 45 00
do Master Lock 3 Assistant do	do do do		Jas. Keys	1 do 1 do	45 00 47 00 45 00 45 00	45 00- 47 00- 45 00- 45 00-
do Master, Bridge 2	do do do	•••	Jas. Grogan Jno Flynn H. Alexander	1 do 1 do 1 do	45 00 45 00 45 00	45 00 45 00 45 00
Master, Lock 4 Assistant	do do do do		J. FranklinS. HopkinsWm. AltoftJ. Woodall	l do	47 00 45 00 45 00 45 00	47 00 45 00 45 00 45 00
Master, Lock 5	do do do	•••	Thos. Scott	1 do 1 do 1 do	47 00 45 00 45 00	47 00 45 00 45 00
Master, Bridge 3	do do do	•••	Jno. Wilde	1 do		45 00 45 00 45 00
Master, Lock 6	, 40	•••	Peter Paxton	do	47 00	1 47 00

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PAY-LIST in duplicate of Persons employed on the Welland Canal, &c .- Continued.

Capacit y.	Whe Emplo		Names.	Time		Rate.	Amount.
Division No. 1Con						\$ cts.	\$ c1
Assistant	Nov.,	1886	Jno. Daley	1 month	1	45 00	45 0
do	do		Chas. P. Sabine	1 do		45 00	45 0
do	do	•••	Chas. Newbold	l do		45 00	45 0
Master, Bridge 5	do do	•••	Wm. Elliott Geo. Spooner	l do l do		45 00 45 00	45 00
Master, Lock 7	do	•••	C. B. Hare	l do		47 00	45 00 47 00
Assistant	do	• • •	M. Sullivan	1 do		45 00	45 00
do	do	•••	Wm. Boyle	1 00		45 00	35 0
do	do		R. Freeman	1 40		45 00	45 0
daster, Bridge 6	do do	•••	Jas. W. Grant	1 do		45 00	45 0
Aaster, Lock 8	do	•••	M. Hayden	l do]	45 00	45 0
Assistant	do		Wm. Reed	l do		47 00 45 00	47 00 45 00
do	do	•••	R. Secord	1 do		45 00	45 0
do	άο	•••	M. McCormack	1 do		45 00	45 0
laster, Lock 9	do	•••	R. H. Watson	l do		47 00	47 0
Assistantdo	do	•••	Alex. Soper	1 do		45 00	45 0
do	do	•••	J. C. Longley			45 00	45 0
laster, Bridge 7	do do	•••	Alex. Bradt	l do		45 00	45 0
Assistant	do	•••	Jno. Cushman	l do		45 00 45 00	45 0 45 0
faster, Lock 10	do	•••	J. Bradley	1 do		47 00	47 0
Assistant	do	•••	J. Mulvey	1 do		45 00	45 0
do	do	•••	Henry Hare	1 70		45 00	45 0
do	do	•••	T. Nelson			45 00	45 0
Assistant	do do	•••	Arthur Cain John McPeachie	l do		45 00	45 0
Master, Lock 11	do	•••	J. Rynoids	l do		45 00 47 00	45 0 47 0
Assistant	do		A. Wilson	1 40		45 00	45 0
do	do		W. P. Burleigh	1 do		45 00	45 0
, do ,	do	•••	J. Webster	1 40		45 00	45 0
laster, Lock 12	do		Wm. Strong	1 do		47 00	47 0
Assistantdo	do do	•••	E Bradley F. Wingham	1 do	***	45 00	45 0
do	do	•••	Jas. McBride	l do		45 00	45 0
faster, Lock 13	do	•••	T. Keating	l do		45 00 47 00	45 9 47 0
Assistant	do		Jos. Turner	1 do		45 00	45 0
	do	•••	J. A. Bradley	1 do		45 00	45 0
do	do	•••	Geo. Millwane	1 do		45 0●	45 ●
Division No. 2.							•
daster, Bridge 9	do	•••	John Black	1 do		4 5 0 0	45 0
ssistant	do	•••	John Olark	1 do		45 00	45 0
aster, Lock 14	do	•••	Con. Nestor	1 do		47 00	47 0
ssistantdo	do	•••	Jas. Winton	1 do		45 00	45 0
do	do	•••	Thos. Flynn	l do		45 00	45 0
aster, Lock 15	do	•••	J. Strong Thos. Aikins	l do		45 00 47 00	45 0
ssistant	do	•••	J. McAuley	1 do	••••	45 00	47 0 45 0
do	do	•••	W. J. Wilson	1 do		45 00	45 0
do	do	•••	Robt. Bovle	1 40		45 00	45 0
laster, Lock 16	do	•••	T. Burley	1 do		47 00	47 0
Assistant do	do do	•••	S. Bradley J. Holland	l do	•••	45 00	45 0
do	do	•••	A. Moran		•••	45 00	45 0
laster, Lock 17	do	•••	M. Coody	l do	•••	45 0 0 47 00	45 0 47 0
ssistant	do	•••	F. Sherman	l do		45 00	45 0
do	do	•••	M. Glynn	1 40		45 00	45 0
do	do	•••	M. Dooher	1 40		45 00	45 0
laster, Lock 18	do	•••	J. H. Pearson	1 do		47 00	47 0
Assistantdo	do	•••	G. Newton			45 00	45 0
do	do	•••	T. Hanna			45 00	45 0
49 <i>d</i> -8		•••		'l do	(45 00	45 0

PAY-LIST in duplicate of Persons employed on the Welland Caual, &s.—Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Division No. 2—Con.	188 6 .			\$ cts.	\$ cts
laster, Lock 19.		R. Grisdale	1 month	47 00	47 00
Assistantdo	dυ	F. Johnson J. J. Duffy		45 00 45 00	45 00 45 00
do	do	T7 TT 11"	1 1	45 00	45 00
faster, Lock 20		J. Reuter	1 do	47 00	47 00
Assistant	do	J. McMann		45 00	45 00
do		John Collins Thos. Friel		45 00 45 00	45 00 45 00
do		F. C. Berriman		47 00	47 00
Assistant		John Cole		45 00	45 00
do	do	Jas. Ellis	1 do	45 00	45 00
_ do		A Clark		45 00	45 00
Master, Lock 22	do	Wm. Hanna Wm. Boyle		47 00 45 00	47 00 45 00
do	do	P. McNamara		45 00	45 00
do		Hy. Phillips		45 00	45 00
Master, Lock 23	do	T. Bonewell	1 do	47 00	47 00
Assistant	do	T. W. Smerdon		45 00	45 00
do	do	T. Commarford J. Corbett		45 00 45 00	45 00 45 00
do	do do	R. Campbell		47 00	47 00
Assistant	do	M. Henderson		45 00	45 00
do	do	T. Bradley	1 do	45 00	45 00
_ do	do	Hy. Kerm		45 00	45 00
laster, Bridge 10	do	Wm. Fleming		45 00	45 00
Assistant	do	F. Galbraith		45 00 47 00	45 00 47 00
Master, Lock 25 Assistant	do	Geo. Detlon		45 00	45 00
do	do	Sam. Campbell		45 00	45 00
do		Robert Wright		45 00	45 00
Master, Bridge 12	do	G. A. Thomas		45 00	45 00
Assistant		Robt. Camp		45 00 42 00	45 00 42 00
Master, Guard Lock	do	. C. X. Collier Sam. Fraser		45 00	45 00
do		Fred. Lay		45 00	45 00
do	do		1 do	45 00	45 00
Master, Bridge 13	do			45 00	45 00
Assistant	do	. William Upper	1 do	45 00	45 00
Division No. 3.					
Master, Bridge 14		. D. O'Leary		45 00	45 00
Assistant.	do .	G. A. Upper		40 00 45 00	40 00
Master, Bridge 15		B. Q'Leary		45 00	45 00 45 00
Port Robinson Ferry		R. Stevenson		30 00	30 00
do Lock	do .	. J. W. McCopper	1 do	47 00	47 00
Assistant		Jas. Walsh		45 00	45 00
Master, Bridge 16		Jas. Edmonds	1, 3.	45 00 45 00	45 00 45 00
Assistant	do .	G. P. Misnes	1 00	45 00	40 00
Division No. 4.					
Welland Lock				45 00	45 00
Master, Bridge 17	do .			45 00 45 00	45 00 45 00
Assistant		L. J. Brennan		45 00	45 00
Assistant		Alex. Hannah		45 00	45 00
Humberstone Ferry	do .	. M. Travnor	1 do	30 00	30 0
Master, Bridge 21	do .	E. Boneberg	1 do	45 00	45 0
Assistant Lask and Pridge	do .	J. Shisler	1 do	45 00	45 0
Port Colborne Lock and Bridge do do		John Henshaw John Cook		42 00 42 00	42 00 42 00
uu uv	. uu .		11 ao	, , , , , , , , , , , , , , , , , , ,	*** U

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c .- Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	
Port Colborne Lock and Bridge do do Port Colborne FerrySignalling and controlling safe passage of vessels through old aqueduct at Welland, night and day.	do do do do	Wm. Aikens	1 do 1 do 30 days 30 do 30 do	1 50 1 50	\$ cts. 42 00 42 00 42 00 45 00 45 00 45 00 45 00	
MACHINISTS. Division No. 1.			·			
Keeping machinery connected with lock gates and waste weirs in proper order throughout. Division No. 2.		Samuel Houston Ed. Newall, h. & wg.			50 00 36 75	
Keeping machinery connected with lock gates and waste weirs in proper order throughout. Diver	do do	V. Mann	29½ do 24½ do	1 75 1 50	61 00 51 63 36 75 33 00	
					\$8,225 69	

D	ate.	Nature of Work.	Amount.	Total.
	886.		\$ cts.	\$ cts.
Nov.	1–30	To G. N. W. Telegraph Co., St. Catharines—Telegrams dur- ing month		20 33
do	30	G. N. W. Telegraph Co., Port Colborne—Telegrams from	1	
đo	30}	June 1st, 1886, to date	l I	7 75
	1	ing month		8 57
do do	1-30 1-30	B. C. Fairfield, St. Catharines—Postage stamps		7 75
		Advertising list of vessels passing through	5 80 8 50	
	ł	do closing canals	8 50	14 30
фo	29	Mail Printing Co., Toronto—Advertising closing canals, 2 insertions		7 00
do	2	Wm. Chelews, St. Catharines—1872 galls. coal oil, at 23c.		7 00 43 12
do	1-30	Wm. N. Garden, Welland — 54 galls. coal oil, at 30 cts., \$16.20; 1 doz. chimneys, \$1.		
	\$	$\frac{1}{2}$ doz. chimneys, 50 cts.; wick, 23; matches, 13 cts	0 76	
do	1–30	John Mathews, Port Colborne-		17 96
40	1-00	34 gails. coal oil, at 30 cts., \$10.20; 2 cords wood, \$10	20 20	
	ļ	2 deck brooms, 70 ets.; lamp wick, 26 ets	0 96	21 16
do	30	John Devaney, St. Catharines—	01 71	10
		20,570 lbs. furnace coal, at \$6.00 per ton		
	l	2,000 lbs. do 6.25 do	6 25	100 10
do	30	(Above for canal office and lock bridge tenders.) Rich. Leeson, Merriton—11½ cords of hardwood, at \$5.50		120 19 63 25
do	20	Albert Hannah, Welland Junction-2 cords of wood, at \$4		8 00
do	30	Liverpool, London and Globe Insurance Co., J.W. Keating, Agent, St. Catharines—Premium of insurance on Gov-		
do	10	ernment sifting scow, renewing policy for one year M. L. Polte & Co., Toronto—1 Ontario Directory		20 00 5 00
do	30	Grand Trunk Railway Co., St. Catharines—1 month's		5 00
do	30	wages 8 bridge tenders on railway bridges, at \$45 each W. W. Wait, St. Catharines—Use of horse and waggon		360 00
uo	30	delivering oil and stores along line of canal to Marlatt's		
	- 1	R. D. Dunn, Paymaster, St Catharines—		20 00
do	20	Horse and huggy half a day naving men	1 50	
do do	22 22	Team do do Expenses assistant and team	4 00 1 25	
do	23	Railway fares and hack hire, Welland and return	1 55	
	24–25 10–26	do Dunnville and return	2 60	
		acquitting October pay-list and account, at \$3	9 00	
do	30]	Bell Telephone, Welland-Telephone services		19 90 14 80
do	30	O. H. Garner, Welland—Telegrams during month		6 46
do	30	47 weeks' board and lodging for C H. Carter, in charge of old aqueduct, Welland, at \$4		17 14
Men	,,	A. D. White, Welland— Horse and buggy to Merritton		
May Sept.	19 19	do Port Robinson	2 50 1 50	
Nov.	20	Team half a day	3 00	
Oct. Nov.	9 6}	Horse and buggy, Junction twice	2 00	
do	30	G. H. Burgar, Welland-Use of office for paymaster paying		9 00
	- [canal men, once a month for last 4 years, at \$6 per an.		24 00
do	27	The Globe Printing Co., Toronto—Advertising closing canals		
	I		-	4 50
	- }			840 18

PAY-LIST in duplicate of persons employed on the Old Welland and Feeder Canal during the mouth of November, 1886, to jay Permanent Establishment and Account, chargeable to Staff and Working Expenses.

Capacity.	Whe Emplo		Names.		Time	••	Rate.	Amount
				-	<u> </u>			
)	Mar 1	006	J. B. Smyth	١,	mant	h	\$ cts.	\$ 0 100 (
Overseer		000.	Sam. Duffin	li	do		42 00	
	do	•••	Wm. L. Smith		do	•••	42 00	42 (42 (
Assistant	do do		R. Edgraft		do	•••	42 00	42
do			John House		do	•••	42 00	42
do	do	•••	Walter Weaver			•••	42 00	42
laster, Lock 2 and Bridge	do	•••			do	•••	42 00	42 (
Assistant	do	•••	T. Johnson	1	qo	•••		
qo	do	•••	W. H. Charles		do	•••	42 00	42 (
do	do	•••	John Sullivan	Ţ	do	•••	42 00	42 (
t. Paul Street Bridge	do		Wm. McClorey	11	ďο	•••	38 00	38 (
ssistant	do	•••			do	•••	38 00	38 (
laster, Lock 3	do	•••			do	•••	38 00	38 (
Assistant	do	•••			do	•••	38 0 0	38 (
laster, Lock 4 and Bridge	do	•••	James Livingstone	1	do	•••	42 00	42 (
ssistant	do	•••	James Boyle	1	do		42 00 1	42 (
faster, Locks 5, 6, 7 and Bridge	do	•••	Robert Boyle	11	do		42 00 1	42 (
saistant	do		Micheal White		do	•••	42 00	42
laster, Locks 8, 9, 10 and 11	do		Barney Clark		do		38 00	38 (
ssistant	do		C. W. Bradley		do		38:00	38 9
laster, Locks 12, 13, 14, 15 and bd.	do		James Cogan		đo	•••	38 00	38 (
ssistant	do		Martin Nestor		do		38 00	38 (
[aster, Locks 16, 17 and 18	do		Barnett Darby		do	•••	38 00	38
ssistant	do		Robert Gibson		do	•••	38 00	38
laster, Locks 19, 20 and 21	do		Ed. McLaughlin		-	•••	38 00	38
					do	•••	38 00	38 (
ssistant	do		Robert Bradley		ďο	•••		38
	du		John McNamara		do	•••	38 00 1	
Ssistant.	do		A. W. Bradley		do	•••	38 00	38 1
laster, Lo ks 23, 24 and Bridge	do		John Neil		do	•••	42 00	42 (
ssistant	dø		D. Ryckman		ďο	•••	38 00	38 (
laster, Lock 25 and Guard Lock.	do		John Fluellan		do	•••	38.00	384
ssistant	do		Rufus Swazzie		do	•••	38 00	38.0
Iurst's Bridge	do		Jacob Rent r		ďο	•••	38 00	38'0
[arlatt's do	, do		Nelson Higgins		do	•••	38 00	38:0
llanburgh Bridge	do	•••	A. H. Upper	1	do	•••	38 00	38 (
do Lock	' do	• • •	Wm Higgins	1	do	•••	38 00	38 (
do Asst. Luck	do	•••	Lewis Moster	1	do	•••	38 00	38 (
do Guard Lock	do	•••	Aaron Higgins	1	do		38 00	38 (
do Asst. Guard Lock	do	•••	Oscar Upper	1	do		38.00	38 (
oreman on Banks	đó		John Gearin		do	•••	38 00	38
Feeder Division.				١.			l I	
verseer	do		John E. Scot'		do	•••	800 per an.	66 (
unction Lock	do		George Hannah		do	•••	38 00	38 (
eeder, Float Bridge	do	•••	John Henderson	1	do		10 00	10 (
tromness do	do		George Harris		do	•••	38 00	38 (
ort Maitland Lock	do		M. Corcoran		do	•••	38 00	38 (
do Asst. Lock	đò	•••	Wm. Brennan		do		38 00	38 (
leg. of water at Dunnville	do	•••	Charles Trush		do	•••	38 00	38 (
-0		•••		1-			1	

Accounts Chargeable to Old Welland and Fee to Canal Staff and Working Expenses.

Date.	Nature of Work.	Amount.	Total
1886. Nov. 30	To Dunnville Electric Light Co., Dunnville—60 lightings at Swing Bridge and Guard Lock, at 162c	\$ cts.	\$ cts 1,000 60 1,006 00

PAY-LIST in duplicate of Persons employed on the Welland Canal during the month of December, 1886, to pay permanent establishment and accounts chargeable to Staff and Working Expenses.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Super- annuation
Superintendent PaymasterAccountant	do	Wm. Ellis R. D. Dunn J. E. Lawrence	1 do	\$ cts. 2,900 00 1,400 00 1,000 00	\$ cts. 241 67 116 67 83 33	\$ cts. 14 50 7 00
Harbor Masters.						
Port Dalhousie Port Colborne	do	Wm. Cooke C. H. Carter		750 00 750 00	62 50 62 50	3 75 3 75
Overseers.						
Division No. 1	do do	J. G. Demare	1 do 1 do 1 do	100 00 75 00 60 00 65 00 65 00 1 25	100 00 75 00 60 00 65 00 65 00 38 75	6 00 3 60
Division No. 1.						
Port Dalhousie Ferry. Master, Lock 1	do . do . do . do . do . do . do . do .	J. M. Wocdall	# month 2 do 4 do 5 do 6 do 7 do 8 do 8 do 9 do 10 do 11 do 12 do 13 do 14 do 15 do 16 do 17 do 18 do	42 00 45 00 45 00 45 00 45 00 47 00 45 00 45 00 45 00 45 00 45 00	37 80 40 00 22 50 22 50 22 50 22 50 23 50 22 50 22 50 22 50 22 50 22 50 22 50 22 50 22 50	1 55 1 41 1 41 1 41
Master, ridge 2 Assistant Master, Lock 4 Assistant do do Master, Lock 5 Assistant do do 7 Ster, Bridge 3 Sistant Ster, Lock 6 Sistant	do do do do do do do do do do do do do d	John Flynn H Alexander Jos Franklin Samuel Hopkins Wm. Altoff John Woodall Thos. Scott J. Pennington Thos. Jones John Wilde G. W. Brownlee M. Moriarity Peter Paxton John Daley	do do	45 00 47 00 47 00 45 00 45 00 45 00 47 00 45 00 47 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00	22 '50 22 50 23 50 22 50 22 50 22 50 23 50 22 50 22 50 22 50 22 50 22 50 22 50 22 50 22 50 22 50	1741
do do Master, Bridge 5 Assistant Master, Lock 7. Assistant do do Master, Bridge 6 Assistant Master, Lock 8 Assistant do do	do do do do do do do do do do do do do d	Chas. Newbold Chas. Sabine Wm. Elliott Geo. Spooner C. B. Hare M. Sullivan Wm. Boyle R. Freeman Jas. W. Grant Alex. Stewart Arch. Hayden Wm. Reid Wm. Reid R. Secord M. McCormick	do do	45 00 45 00 45 00 45 00 47 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 47 00 47 00 48 00 47 00 48	22 50 22 50 22 50 22 50 22 50 23 50 22 50	1 47

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c .- Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Super- annuation
Division No. 1—Con.	1886.			\$ cts.	\$ cts.	\$ cts.
Master, Lock 9	December.	R. H. Watson	½ month	47 00	23 50	
Assistant	do	Alex. Soper	1 do	45 00	22 50	
do		J. C. Longley		45 00	22 50	i .
do Aaster, Bridge 7		Alex. Bradt	do	45 00 45 00	22 50 22 50	
Assistant		Thos. Cushman		45 00	22 50	
laster, Lock 10		James Bradley	do	47 00	23 50	1 47
Assistant		James Mulvey	1 do	45 00	22 50	1 41
do do		Hy. Hare Thos. Wilson	₫ do	45 00	22 50	1 41
do		Arthur Cain	do	45 00 45 00	$\begin{array}{cccc} 22 & 50 \\ 22 & 50 \end{array}$	
Assistant	do	M. McGeakie	do	45 00	22 50 22 50	
faster, Lock 11	do	Jas. Reynolds	½ do	47 00	23 50	
Assistant do		Alex. Wilson	do	45 00	2 2 5 0	1 41
do do		W. Burleigh James Websher	do	45 00 45 00	$\begin{array}{ccc} 22 & 50 \\ 22 & 50 \end{array}$	
faster, Lock 12	do	TT7 C1.	do	47 00	23 50	1 47
Assistant	do	E. Bradley	do	45 00	22 50	
do		F. Mughan	₫ do	45 00	22 50	
do	do	Jas. McBride	₫ do	45 00	22 50	l
Assistant	do	Thos. Keating Jos Turner	do	47 00 45 0 0	23 50 22 50	-
do		J. H. Bradley		45 00	22 50	
do		Geo. Mullard	1/2 do	45 00	22 50	
Division No. 2.	ļ					
Aster, Bridge 9		Jno. Black	½ do	45 00	22 50	
Assistant	do	Jno. Clark	₫ do	45 00	22 50	
laster, Lock 14		Con. Nestor J. Winton	do	47 00 45 00	23 50 22 50	
do	do	Thos. Flynn	do	45 00	22 50	1 41
do	do	Thos. Strong	₹ do	45 00	22 50	٠.
laster, Lock 15	do	Thos Aikens		47 00	23 50	
Assistant do	do	J. McAuley N. J. Wilson		45 00 45 00	$\begin{array}{ccc} 22 & 50 \\ 22 & 50 \end{array}$	1 41
do		R. Boyle		45 00	22 50	
Master, Lock 16		T. Burley	½ do	47 00	23 50	
Assistant		S. Bradley	1 do	45 00	22 50	
do	do	A. Moran	₫ do	45 00	22 50	1 41
do Master, Lock 17	do	Jno. Holland Arch. Coody	do	45 00 47 00	22 50 23 50	
Assistant	do		do	45 00	22 50	
- do	do	M Dooher	1 do	45 00	22 50	
do Master, Lock 18		M. Glynn		45 00	22 50	
Assistant	do	J. H. Pierson Geo. Newton	do	47 00 45 00	23 50 22 50	
do	do	7D TT		45 00	22 50	
_ do	do	Jas Cook	1 do	45 00	22 50	
Master, Lock 19		R. Grisdale	do	47 00	23 ! 0	٠.
Assistantdo	do	F. Johnson J. J. Duffy	do	45 00 45 00	22 50 22 50	
do	do	F. Hoshke		45 00	22 50	
Master, Lock 20	do	Jacob Reuter	½ do	47 00	23 50	
Assistant		T. McMann		45 00	22 50	
do do	do	John Collins Thos. Freel		45 00	22 50 22 50	1 41 1 41
do	do	J. C. Berriman	do	45 00 47 00	23 50 1	1 71
Assistant	do '	John Cole		45 00	22 50	
do	do	James Ellis	½ do	45 00	22 50	
do		A. Clark	₫ do	45 00	22 50	
Master, Lock 22 Assistant		Wm. Hannah Wm. Boyle	do	47 00 45 00	23 50 22 50	
do		P. McNamara	do	45 00	22 50	1 41
do		Henry Phillip	do	45 00	22 50	

PAYLIST in duplicate of persons employed on the Welland Canal, &c .- Continued.

	Employe	u	Names.	T		Rate.	Amoun	-	annuation
Division No. 2-Con.	1886.					\$ cts	\$ c1	ts.	\$ cts.
Master, Lock 23	Decembe	r.	r. Bonewell	1 I	nonth	47 00	23 5		
Assistant			J. Somerdon	7	do	45 00 45 00	22 5 22 5		1 41
do			J. Corbett J. Commorford	7	do	45 00	22 5		1 41 1 41
Master, Lock 24			R. Campbell	1	do	47 00	23 5		
Assistant	do .]]	M. Henderson	7/2	do	45 00	22 5		
_do			T. Bradley	, 2	do	45 00	22 5		
do	do	•••	Henry Kerm Wm. Flemming	1	do	45 00 45 00	45 0 45 0		
Assistant	do		Fr. Galbraith	į,	do	45 00	22 5		
Master, Lock 25	do		M. McCarthy	12	do	47 00	47 0		1 76
Assistant	do		Geo. Delter	1 2	do	45 00	22 5		
do			S. Campbell	1,	do	45 00	45 0		
do			Robt. Wright Geo. A. Thomas	1	do	45 00 45 00			
Assistant			Robert Camp	1	do	45 00			
Master, Guard Lock	do		C. H. Collier	1	do	42 00	21 (0	1 31
Assistant	do		Sam Fraser	2	do	45 00			,
do			Frederick Lay	1	do	45 00			1 41
do Master, Bridge 13			James Cook R. Higgins		do	45 00 45 00			1 41
Assistant			Wm. Upper	1	do	45 00			7 71
Division No. 3.				*					
Master, Bridge 14	do		Daniel O'Leary	1	do	45 00	22 1	50	1 41
Assistant	.) dò		G. A. Upper	1	do	40 00	20 (90	
Master, Bridge 15	do		Bart. O'Leary		do	45 00			1.41
Assistant Port Robinson Ferry			Geo. Thompson		do	45 00 30 00			1 41
do Lock			R. Stevenson J. McCoppin		do	45 00			1 4
Assistant			Jas. Walsh		do	45 00			1 41
Master, Bridge 16	do	***	Jas. Edmonds	1	do	45 00			.1 41
Assistant			G. P. Misner		do	45 00			
Welland Lock Master, 3ridge 17	do		Wm. Wilson		do	45 00 45 00			1 41
Assistant	· do · do		Jas. Foster L. J. Brenen		do	45 00			1 -
Master, Bridge 19			Alex. Hannah		do	45 00			14
Assistant		•••	Chas Hannah	1 2	do	45 00			1 41
Humberstone Ferry		•••	M. Traynor		do	30 00			, ,,
Master, Bridge 21 Assistant		•••	E. Bonabery I. Shisler		do	45 00 45 00			14
Port Colborne Lock			John Henshaw		do	38 0) in ''		
do do		•••	do	$\frac{1}{2}$	do	42 0	1 40	00	1 50
do Bridge		•••	John Cook		do	42 0			1 3
do d o			John Stevens		do	42 0			1 3
do do do do			Wm. Aikens J. Dunlap		do do	42 0 42 0			1 3
do Ferry			John Bradley		do	42 0			1 5
In charge of iron and stee bridges, also steam pum	el l	٠					-}		
Signalling and controllin safe passage of vesse	do g	•••	W. Chatfield	. 1	do	75 0	0 75	00	
passing through old aque	}-			1		ŀ	i		.]
duct and watching same			Ton Malfurnan					٠.	1
&c., night and daydo do		•••						50	1
do do	do	•••	TT77110 ' NT1	. 16	do		n 13		1
do do					do	1 2	5 3 40	50	Ĭ.
do do		•••	James Nixon	. 15	đo,	1.5			
do do	do		Robert Simpson	115	do	1 5	n 1 - 249-	50	4
uo uo	1		1 ODOLO SIMPIONIII	٠١٠٠	40,		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		1:

ACCOUNTS Chargeable to Welland Canal Staff and Working Expenses.

<i>D</i> .	ate.	Nature of Work.	Amount.	Total.	
18	86.		\$ cts.	\$ 0	ets.
Dec.	1-31	To G.N.W. Telegraph Co., St. Catharines-Telegrams for	. [.		ا قعد۔
do do	1-31 31	G.N.W. Telegraph Co., Welland—Telegrams for December do do Port Robinson—Telegrams for	I.	12 1	94
do	31	November and December	1	1	71
do do	1–31 31	tober 1st to December 27th, 1886		2	_
do	31	from October 17th to December 31st, 1886		11	05
do	1-31	ending December 31st, 1886 B. C. Fairfield, St. Catharines—Postage			75 9 8
July	24	D. W. Bixby, St. Catharines—Closet paper, 40c.; Oct., elastic bands, 25c		0	65
Oct.	21	To the News Publishing Co., St. Catharines-	4.00		
do	25	300 letter circulars	2 50		
Nov. Dec.	27 31	Advertising closing canals	10 00 4 00	20	50
Nov.	1-30	Henry Musson, Allanburg— 14 gals, coal oil, at 30 cts.; 1 lock, at 35 cts.; 1½ box	4 70	20	
Dec.	1-31	matches, at 23 cts	4 78 0 90	5	68
Nov.	29	Wm. N. Garden, Welland—91 gals. coal oil, at 30 cts		2	85
Dec.	1-31	John Mathews, Port Colborne— 4 gals. coal oil, at 30 cts.; 1 office lamp, at \$1.15	2 35		
		at 20 cts	1 70	4	05
do	1-31	A. Thompson, Welland—24 weeks' board and lodging for C. H. Carter, in charge of aqueduct, at \$4		10	28
·do	1–15	time for 8 railway bridges tender, at \$45 per month		180	00
	•	St. Catharines and Welland Canal Gas Light Co., St.			
·do	31		5,000 00 37 50		
		1885, to Dec. 1, 1886		5,087	75
- đ o	31	J. G. Demare, Overseer, Port Dalhousie— Use of horse and waggon in connection with overseer's duties, 3 months ending Dec. 31, 1886, at \$1.50 per	1		
		Paid postage and post cards per year 1886	37 50		02
do	31	James Dell, Overseer, Thorold— Use of horse and waggon in connection with overseer's duties, 3 months ending Dec. 31, at \$150 per annum 3 months' rent of house, at \$8	37.50		- JA
				61	50
Dec.	31	2 railway fares, St. Catharines and return, at 60c Paid postage 3 months	1 20 0 55		
		Use of horse and waggon delivering coal oil and supplied during season of navigation.	40 00		

ACCOUNTS chargeable to Welland Canal Staff and Working Expenses - Continued.

D	ate.	Nature of Work.	\$ cts.	\$ cts
18	386.			
	1–31 1–30	Thos. R. Secord, Overseer, Port Colborne— 15 railway fares, Welland and return, at 45c 6 do Air Line do at 20c 17 do Welland do at 45c 7 do Air Line do at 20c	6 75 1 20 7 65 1 40	
Dec.	1-31	16 do Welland do at 45c	7 20 3 00	27 20
do	30	John Devaney, St. Catharines— 1 ton coal, \$6.50; 4 tons coal at \$6.75, \$27 00 1 ton coal	33 50 6 35	39 75
Nov.	1-30	Wm. Pike, Thorold— 7,045 lbs. coal, at \$6.25	22 01 8 17	
Dec.	31	James McCoppin, Postmaster, Port Robinson-1 year rent post office box (1886)		30 28 1 00
do	31	St. Catharines Post Office, St. Catharines—Box rents to July 1st, 1887 (3)		3 00
go ,	1–31	C. P. R. Telegraph Co., St. Catharines—Telegrams for month.		6 51
d o	1–31	W. W. Wait, St. Catharines—Use of horse and waggon de- livering coal oil and stores along canal		20 00
Oct.	14	R. D. Dunn, St. Catharines (sundry accounts)— Paid city tax, watering street front of office Paid Bank of Commerce telegrams, October; November and December (credit) Paid hack hire for messenger, October and November Paid bus do do Paid freight on diving apparatus	2 18 1 00 0 50 0 15 0 40	4 23
	16 17 18 20-21 15-22	R. D. Dunn, Paymaster, St. Catharines— Horse and buggy half day paying men	2 50 1 10 1 55 2 85	4 23
	.*-	ing \$3	9 00	18 50
do	1-31	Richard Leeson, Merriton—5 cords hard wood, at \$5.50	·	27 50
do	31	William Ellis, Superintendent, St. Catharines—Quarterly allowance.		75 00
do	3–10	John Sutter, St. Catharines—8 tons coal, at \$6 25		\$5,833 7

PAY-LIST in duplicate of persons employed on the Old Welland Canal and Feeder during the month of December, 1886, to pay permanent establishment and accounts chargeable to Staff and Working Expenses.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Superan- nuation.
	1886			\$ cts.	\$ cts.	\$ ets.
Overseer	December	J. B. Smyth	1 month	100 00	100 00	6 00
Manager Table 1 and Daiden			4 do	42 00	21 00	1 31
Master, Lock 1 and Bridge	do	70 1 10 1 6	1 40	42 00	21 00	1 31
Assistant	do	TTT . T (V 1	do		21 00	1 31
, qo	do			42 00		1 31
_ do		John House	½ do	42 00	21 00	
laster, Lock 2 and Bridge		. W. Weaver	½ do	38 09	40 00	1 55
do	do	. do	1/2 do	42 00	}	
Assistant	do		do do do do do	42 00	21 00	1 31
do		. W. H. Charles	do	42 00	21 00	1 31
do	do	. John Sullivan	1 do	42 00	21 00	1 31
St. Paul Street Bridge	do .	Wm. McClay	1 do	38 00	19 00	1 18
Assistant	do		1 do	38 00	38 00	1 42
Master, Lock 3		. Alex. Walker	1	38 00	19 00	1 18
Assistant		Fred. Sherer		38 00	19 00	1 18
Master, Lock 4, and Bridge		J. Livingston	i do	42 00	21 00	1 31
Assistant	do .	Ian Royle	1 do	42 00	1 1	
do		Jas. Boyledo	do	35 00	} 40 00	
		I		42 00	21 00	1 31
Master, Lock 5, 6, 7 and Br.	uo .					1 31
Assistant		. Michael White		42 00	21 00	
laster, Locks 8, 9, 10 and 11	do .	. Bernard Clarke		38 00	38 00	1 42
Assistant		. C. W. Bradley	1 do	38 00	38 00	1 42
laster, Locks 12, 13, 14, 15	_	1 _	1		j	
and Bridge	do .	. Jas Cogan	do	38 00	19 00	1 18
Assistant	do .	. Martin Nestor		38 00	38 00	1 42
Master, Locks 16, 17 and 18	do .	B. Darby	. do	38 00	19 00	1 18
Assistant	do .	. R. Gibson		38 00	19 00	i 18
Master, Locks 19, 20 and 21	do .	. E. McLaughlin		38 00	38 00	1 42
Assistant	do .	. R. Bradley		38 00	19 00	1 18
Master, Lock 22 and Keefer			2			
Bridge		. John McNamara	} do	38 00	19 00	1 18
Assistant		. A. W. Bradley		38 00	19 00	l î î î
Masistalit		John Neil		38 00	10 00	}
Master, Locks 2, 3, 24 and Bi		1 1			40 00	1 55
do	do .			42 00	1 30 00	1 , ,,
Assistant		. D. Ryckman		38 00	19 00	1 18
Master, Lock 25 and Gd. Lk		. J. Fluellyn		38 00.		
Assistant		. Rufus Swazzie		38 00	19 00	1 18
Hurst Bridge	do .	. Jacob Reuter		38 00	19 00	1 18
Marlatts Bridge	do .	. Nelson Higgins	. 🧎 do	38 00	19 00	1 18
Allanburg Bridge	do .	. A. H. Upper	🖟 do	38 00	19 00	1 18
do Lock		. Wm. Higgins		38 00	38 00	Over 35 y
Assistant		Lewis Mosier		38 00	19 00	1 18
Allanburg Guard Lock	do .	. Aaron Higgins	. 🚦 do		19 00	Over 35 y
Assistant	do .	. Oscar Upper	1 do		19 00	
Foreman on banks	do .				38 00	1 42
Feeder Division.		oran oran oran oran oran oran oran oran	uo	"		<u> </u>
	1 .					١
)verseer			. 1 do		66 67	4 0
Junction Lock		. Geo. Hannah	. 1 do		38 00	1 4
Feeder, Flout Bridge	do .	. John Henderson	. 🧎 do		5 00	l .
Stromness Bridge	do .	. Geo. Harris	. do		19 00	1 1
ort Maitland Lock		. Michael Corcoran.			19 00	1 1 1
Assistant		. Wm. Brennan			19 00	1
Registrar of Water at Dunn-			1 4	1	1 2000	
	do .	Chas. Trush	. 1 do	38 00	38 00	Over35 y
ville	"" .		· - uo	30 00	30 00	J.0100 J
	i	I	1	1	1,261 67	54 8

Accounts Chargeable to Old Welland Canal and Feeder Staff Working Expenses.

D	ate.		Nature of Work.	\$ ets.	\$	cts:
	886.	То	J. B. Smyth, Overseer, Merriton— Use of horse and waggon in connection with Overseer's duties, 3 months ending 31st Dec., 1886, at \$750 per annum 3 months' rent of house, at \$8.00.	37 50	61	50
	31		John E. Scott, Overseer, Dunnville— Horse and waggon to Junction, 2 days, at \$2.00 do do Port Maitland, Marshville, Bolton Ditch and Town Line, 7 days, at \$1.50c Horse and waggon to Junction, 2 days, at \$2.00	10 50 4 00		
Dec.	31		do do Town Line, Bolton Ditch, Port Maitland and Marshville, 5 days, at \$1 50c Horse and waggon to Junction, 2 days, at \$2 00 do do Port Maitland, Stromness, Town Line and Marshville, 5 days, at \$1.50c	7 50 4 00	37	50
do	31	To	G. N. W. Telegraph Co., Dunnville—Telegrams from October to date		5	
do	31	То	Dunnville Post Office, Dunnville-Postage		9	14
July Sept.	11 10 15 20 21	То	J. H. Smith, Dunnville— Journal, 75c.; slate, 10c.; bands, 35c.; 2 doz. pens, 20c 3 quires foolscap, 70c.; (16) ½ doz. pen holders, 30c Pocket ledger, 35c.; (June 22) 4 quires foolscap, 50c Box envelopes, 50c.; 1 quire account paper, 25c Ink, 3@c.; red ink, 15c Day book	1 00 85 75		
do	31	То	Robert White, Dunnville—Printing 200 blank forms of banking ground permits for Welland Canal Feeder		4	1.3
do	31	То	John Tarry, Dunnville-4 cords hard wood for office at Dunnville, at \$3.50c	l l	14	00
do	31	То	Dunnville Electric Light Co , Dunnville—62 lights for Guard Lock and Swing Bridge, at 163c		10	33
ďo	11	r	St. Catharines and Welland Canals Gas Light Co., St. Catharines. Gas supplied old Welland Canal for season 1886, as follows:—2 lamps, Lock 1; 3 lamps, Lock 2; 2 lamps, Lock 3; 2 lamps, Lock 4; 9 lamps, 6 ft. burners, at			
			\$30	270 00 40 00 5 90	315	90
do	4	То	John Sutter, St. Catharines-1 ton coal		6	25
			Total		469	21

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of January, 1887, to pay permanent establishments and accounts, chargeable to Staff and Working Expenses.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Superintendent	do do	William Ellis	1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 month 1 do 1 do 1 do 1 do 1 do 1 foldo 1 do 1 foldo	1 25	\$ cts. 241 67 116 67 83 33 62 50 62 50 100 00 75 00 65 00 65 00 65 00 22 00 22 00 22 00 22 00 22 00 22 00 38 00 19 38 19 38 19 38
					1,378 94

D	ate.	Nature of Work.	Amount.	Total	•
1	887.		\$ cts.	\$	cts.
Jan.	31 To	o Great North-Western Telegraph Co., Port Dalhousie-			00
do	3	Telegrams four months, Oct. and Nov., 1886 Bell Telephone Co., St. Catharines—Telephone communi-			09
		cations, Nov. and Dec, 1886		3	45
do	3	cations, Nov. and Dec, 1886	••••••	3	75
T.,1.,.	10	H. Carlisle & Co, St. Catharines— 23½ yds. curtain shiff for shades, at 30c			
July	16	9 fixtures, at 35c			
		9 pulls, at 5c	0 45		
	1	Making and putting up shades	3 00		
T	7.10	Wm N Carden Welland Amella coal oil			65 20
Jan. do	7-19 29	Wm. N. Garden, Welland—4 galls. coal oil		1	40
u.o	-0	at \$\delta 50		70	65
do	3	John Devaney, St. Catharines-3,830 lbs. stove coal, at			
	ا مر	\$6.50		e 12	45
do	24 16–86)			1	65
Jan.	28	Henry Mimis, Welland-5 cords hard wood, at \$4		20	00
do	1	St. Catharines Water Commissioners, St. Catharines-1		l	
	.,			21	. 00
-do	31	W. W. Wait, St. Catharines—Use of horse and waggon delivering coal oil		20	00
	}	R. D. Dunn, St. Catharines—		20	
do	19	Horse and sleigh 1 day, paying men		}	
ďο	20	do	2 50	Ì	
do	21	Expenses horse and assistant	1 10	í	
do do	24–25 18–25	Railway and hack hire, Welland and returndo Dunnville	1 50 2 85	1	
·uo	10-20	3 days' board and lodging, self, away from home pay-			
	Į.	ing men, at \$3	9 00		
	ĺ	, . ,		19	45
	ł			195	34

Number of Pay-list 160. Pay-list in duplicate of persons employed on the Old Welland and Feeder Canal during the month of January, 1887, to pay permanent establishment chargeable to Staff and Working Expenses.

Capacity.	When employed.	Names.	Time.	Rate.	Amount.
Overseer	do do do do do do do do do do do do do	John B. Smyth	1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do	\$ cts. 100 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00	\$ ci 100 0 38 0 19 0 19 0 19 0 19 0 19 0 19 0 19 0 38 0 38 0 38 0 38 0
race		Wm. McClorey John E. Scott	do	38 00 800 00	19 0
Regulating water, Junction Lock. do Dunnville Lock	do	Geo. Hannah Chas. Trush	1 do	38 00 38 00	19 0 38 0 698 6

Accounts chargeable to Old Welland and Feeder Canal Staff and Working Expenses.

Date.	Nature of Work.	Amount.	Total.
Jan. 1-31, 1887 do 31, 1887 Dec. 9, 1886 Nov. 20, 1886 Jan. 18, 1887 Oct. 19-20, 1886	Advertising water out of canal	3 00 2 00	10 33 5 00 6 50 6 25 15 25 43 33

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of February, 1857, to pay permanent establishments, chargeable to Staff and Working Expenses.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Superintendent Paymaster Accountant Harbor master, Port Dalhousie do Port Colborne Overseers Division No. 1 do do No. 2 do do No. 3 do do No. 4 Storekeeper, &c Messenger In charge of steel and iron bridges, also steam pumps, &c. Regulating water, Lock 1 do do 24 do do 24	1887. February do do do do do do do do do do do do do do do	Wm. Ellis	1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 28 days 1 month 1 do	750 00 100 00 75 00 60 00 65 00 1 25 75 00 38 00	\$ cts. 241 67 116 67 83 33 62 50 62 50 100 00 75 00 60 00 65 00 65 00 35 00 75 00 38 00 45 00
do do 25 do do 25 do do 25 do Port Colborne lock. Watching old aqueduct at Welland, night and day do do do do do do	do do do do do do do	Robert Wright. Geo. Detlor Robert Camp James Cook John Henshaw Jos. McMurray William Nixon Robert Simpson James Nixon	do do do do do do do days days	45 00 45 00 45 00 45 00 38 00 1 25 1 25 1 25 1 25	22 50 22 50 22 50 22 50 38 00 17 50 17 50 17 50

I)ate.	Nature of Work.	Amount.	Т	otal	
	1887.		\$ cts.	9	 \$	cts.
Feb. do do do do do do	1-28 28 26 17 28 1-28	B. C. Fairfield, St. Catharines—Postage stamps. M. G. Keating, St. Catharines—Subscriptions "Chicago Inter Ocean," 1 year. John Devaney, St. Oatharines—2 tons stove coal Richard Woods, St. Catharines—2 mos. rent for house during July and August; overseer's house undergoing repairs, &c W. W. Wait, St. Catharines—Use of horse and waggon delivering coal oil, &c William Pike, Thorold—2,700 lbs. stove coal R. D. Dunn, paymaster, St. Catharines—			9 2 5 8 13 20 20	69 72 00 00 00 00
do do do do do	17 18 19 21–22 17–22	Horse and buggy, 1 day, \$2.50; expenses assistant and horse, 75c	3 25 1 50 1 50 2 60 9 00			85 95
				\$	110	9

PAY-LIST in duplicate of Persons employed on the Old Welland and Feeder Canal during the month of February, 1887, to pay Permanent Establishment and Accounts chargeable to staff and working expenses.

Capacity.	Wher Employ		Names.	Time.			Rate.		Amoun	t.
	1887									
Overseer	Februa	. v	Jno. B. Smyth	1 m	onth		100	00	100	00
Regulating water, Locks 2 to 3	do	•••	Walter Weaver	1 (do			00	38	
do do 3 to 5	do		Fred Sherer		do		38		19	
do do 3 to 5			Tim Sullivan		do			00 J	19	
do do 5 to 11	do		James Boyle		do			00	19	
do do 5 to 11		•••		1	do			00	19	
do do 11 to 16		•••	Barnett Darby	1	do			00	19	
do do 11 to 16			Martin Nestor		do		3 8	00	19	00
do do 16 to 20		•••	Ed. McLaughlin	1	do	}	38	00	19	
do do 16 to 20	do		Robert Gibson		do		38	00 1	. 19	00
	do		Jno. McNamara	Į,	do		38	00	19	00
do do 20 to Gd {	do		Rufus Swazzie		do	\	38	00	19	00
	do		John Neil	1	do		3 8	00	38	00
do Allanburg Lock	do		William Higgins		do		38		3 8	00
do do	do	•••	Lewis Mosier	1 3	do		38			00
do do	do	•••	A. H. Upper	1 2	do		38			00
In charge of waste wiers	. do		John Fluellyn	1	do					00
do do	. do		Nelson Higgins		do					00
do do	.l do	•••	Richard Higgins	1 1	do		38	00	19	00
do water and banks,	¥[1		- 1				
mile lock	.l do	•••	John Gearin	1	do		38	00	38	00
In charge of hydraulic race	do	•••	C. W. Bradley	1	ďο			00		00
do do	. do		Mich. White		do	•••	38	90	38	00
Feeder Division.	1			ĺ						
Overseer	. do		John E. Scott	l1	do		800	00	66	67
Regulating water, Junction Loc			George Hannah	1 4	do	•••	38	00	19	00
do Dunaville	. do	•••		12	do	•••	38	00	38	00
							j		\$755	67

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of March, 1887, to pay Permanent Establishment and Account, chargeable to Staff and Working Expenses.

Capacity.	When Employ		Names.	Time.	Rate.	Amount.	Super- annuation
Supeintendent	Mar., 18	387.	Wm. Ellis	1 month	\$ cts. 2,900 00	\$ cts. 241 66	\$ cts.
Paymaster	do		R. D. Dunn	1 do	1,400 00	116 66	7 00
Accountant			J. E. Laurence		1,000 00	83 34	
Harbor Master—		-			,		İ
Port Dalhousie	do	•••	William Cook	1 do	750 00	62 50	3 75
Port Colborne	do		C. H. Carter	1 do	750 00	62 50	3 75
Overseers—				ŀ			1
Division No. 1	do		J. G. Demare		100 00	100 00	6 00
do 2			Jas. Dell		75 00	75 00	
do 3			A. Hamilton		60 00	60 00	3 60
do 4			T. R. Secord		65 00	65 00	
Storekeeper, &c	do		W. W. Wait		65 00	65 00	
Messenger, &c		•••	Thos. J. Hartley	31 days	1 25	38 75	
In charge steel and iron			er en (c.11		== 00		l
_ bridges, steam pump, &c	. d o	•••	W. Chatfield	1 month.	75 00	75 00	
Ferrymen—			73 1- O:4h	7 do-	1 40	9 80	
Port Dalhousie Ferry			Frank Smith			15 00	
Humberston do			Mich. Traynor John Bradley			42 00	
Port Colborne do		•••	J. M. Woodall		38 00	38 00	1 42
In charge of water, Lock 1 do do 2	1 2 -		Wm. Fleming		45 00	22 50	
do do 20			M. Henderson		17 00	22 50	***************************************
do do 25			F. Bradley		45 00	22 50	
do do 25			Henry Keim		45 00	22 50	
do do 25			Robt. Camp	1 4	45 00	22 50	
do do 2			James Cook		1 1 00	22 50	
do do 25			William Upper		1 7 00	22 50	
do do 2			Geo. A. Thomas		45 00	22 50	
do Port Colborne Lock		•••	John Henshaw		38 00	38 00	1 42
Watching old aqueduct				· · · ·		1	
Welland, night and day			Jos. McMurray	151 days	1 25	19 38	1
do do	٠,٨		Wm. Nixon			19 38	
do do	3.		Robt. Simpson		1 3 05	19 38	
do do	1 1 .	•••	T 37'		1 00	19 38	
	1			"	1		-
				1	1	1,445 73	41 44

Da.	te.	Name of Work.	Amount	Total.
188	87.		\$ cts.	\$ cts
March	31	To J. G. Demare, Overseer Division 1, Port Dalhousie—Horse and waggon in connection with overseer's duties for 3 months ending March 31, 1887, at \$150 per		
do	31	James Dell, Overseer Division 2, Thorold— Horse and waggon in connection with overseer's duties for 3 months ending March 31, 1887, at \$150 per annum	37 50 24 00	37 50
do	31	A. Hamilton, Overseer, Division 3, Port Robinson-3		61 5 0
do	31	month's rent of house at \$8. W. W. Wait, store-keeper, &c., St. Catharines—Horse and		24 00
_	1-31	Thos. R Secord, Overseer, Division 4. Port Colborne—		20 00
Feb.	1–28	1 railway fare to St. Catharines and return	7 20 2 00 1 20	
Mar.	1–31	15 do Welland do at 45c 8 do Air Line do at 25c 18 do Welland do at 45c 6 do Air Line do at 25c	2 00 8 10	
do	1-31	G. N. W. Telegraph Co., St. Catharines-Telegrams for		29 95
do	1-31	C. P. R. Telegraph Co., St. Catharines—Telegrams for	•••••••	14 12
do	1-31	month B. C. Fairfield, St. Catharines—Postage stamps	***************************************	1 31 13 68
do	31	To L. G. Carter, P. M.— Postage stamps for 3 months Post Office box for year 1887		
do do	10 22	The Globe Printing Co.—Advertising opening canal E. F. Dwyre, Port Dalhousie— Telegrams		5 03 9 00
		Express charges, air pump to Montreal	7 40	7 78
do	31	Bell Telephone Co., St. Catharines—Telephone messages for 3 months ending 31st March, 1887		2 20
Feb. March	1 31	Wm. N. Garden, Welland— 9 galls. coal oil, at 30c 1 box matches, 15c.; 3 chimneys, 30c.; wick, 5c	2 70 0 50	3 29
do do	30 31	Wm. Pike, Thorold, 2,500 lbs. stove coal, at \$7.50 per ton John Smith, Port Dalhousie, rent of ferry waiting room	l l	8 12
do	31	from 24th March, 1887, 12 months, at \$2	75 00	24 00
		gineer and Deputy Minister about annual esti- mates, &c. (5 days away)	32 35	107 OF
do do do do do	23	R. D. Dunn, P.M., St. Catharines— Horse and buggy, ½ day, paying men do 1 Hotel bill, assistant, and horse feed Railway and hack fare, Welland and return do Port Colborne to Dunnville do Dunnville to St. Catharines 3 days' board and lodgings for self away from home paying February pay lists, at \$3	1 50 2 50 1 25 1 60 1 50 1 50	107 35
	49 <i>d</i> -			18 85

ACCOUNTS chargeable to Welland Canal, &c .- Continued.

Dat	e.	Nature of Work.	Amou	nt.	Total	 l.
188	7.		\$	cts.	\$	cts.
March	31	J. G. Demare, Overseer, Division 1, Port Dalhousie, allow- ance for extra services regulating the water through- out the northern division of new canal to suit con- tractors' requirements during days, nights and Sun- days from close of navigation, December, 1886, to open-		:		
do	31	John Cook, Port Colborne, services during season of navigation (1886) furnishing monthly statements of lighterages, &c., Port Colborne.	•••••			00
		ngheorages, co., 1 or 0 onto ne			507	

PAY-LIST in duplicate of persons employed on the Old Welland Canal and Feeder during the month of March, 1887, to Pay Permanent Establishment and Account, chargeable to Staff and Working Expenses.

Compact Comp							
Overseer. Mar., 1887 do John B. Smyth. 1 month. 100 00 100 00 6 Regulating water, Lock 2, 3 do do Water Weaver. 1 do 38 00 38 00 19 00 do do James Boyle. 2 do 38 00 19 00 38 00 19 00 do do 5, 11 do do Jas. Livingston. 2 do 38 00 19 00 do do 5, 11 do do Jas. Cogan. 2 do 38 00 19 00 do do 11, 16 do do B. Clarke. 2 do 38 00 19 00 do do 16, 20 do E. McLaughlin. 2 do 38 00 19 00 do do 16, 20 do E. McLaughlin. 2 do 38 00 19 00 do do John McNamara. 2 do 38 00 19 00 Regulating water, Lock 20 to Guard Lock. do John Neil. 1 do 38 00 19 00 Regulating water, Allanburgh Lock. do Jo	Capacity.		Names.	Time.	Rate.	Amount.	Super- annuation
Guard Lock	Regulating water, Lock 2, 3 do do 3, 5 do do 3, 5 do do 5, 11 do do 11, 16 do do 11, 16 do do 16, 20	do do do do do do do do	Walter Weaver James Boyle Jas. Livingston Robert Boyle Jas. Cogan B. Clarke Michael Nestor E. McLaughlin	1 do do do do do do do do do do do do	100 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00	100 00 38 00 19 00 19 00 19 00 19 00 19 00 19 00	6 00 1 42
Regulating water, Lock 20 to Guard Lock	do do 20 to Guard Lock	do	John McNamara	1 do	38 00	19 00	
burgh Lock	Regulating water, Lock 20 to Guard Lock Regulating water, Allanburgh Lock	do	John Neil	1 do	38 00	38 00	over 35 yrs
do do	burgh Lock Regulating water, Allan- burgh Lock	do	Lewis Mosier	1 do	3 8 00	19 00	
Feeder Division. Overseer	do do do do In charge water banks, 4	do	Richard Higgins Aaron Higgins	do	38 00 38 00	19 00 19 00	
Regulating water, Junction do Geo. Hannah 1/2 do 38 00 19 00					38 00	38 00	142
AUGULANING WANCI, DUME-	Regulating water, Junction	do				1	4 00
ville do Chas. Trush 1 do 38 00 38 00 over 35			Chas. Trush	1 do	38 00		over 35 yrs

Accounts chargeable to Old Welland Canal and Freder, Staff and Working Expenses.

D	ate.	Nature of Work.	Amount.	Total.
18	387.		\$ cts.	\$ ctai
Mar.	31	To John B. Smyth, overseer, Merritton— Horse and waggon in connection with duties of overseer for 3 months ending March 31, 1887, at \$150 per annum 3 months' rent of house, \$8	37 50 24 00	61 50
Jan.	1–31	John E. Scott, overseer, Dunnville— Horse and waggon, Port Maitland, 3 days, at \$1.50 do Marshville, 1 day, at \$1.50 do Stromness, 2 days, at \$1.50 do Junction, 1 day at \$2.	4 50 1 50 3 00 2 00	31 00 _.
Feb.	1–28	do Junction, 1 day, at \$2	4 50	
Mar.	1-31	do Marshville, 4 days, at \$1.50	6 00 6 00 2 00	3 6 00
do	28	F. R. Lalor, Dunnville-45 gals. Am. coal oil, at 24c		10 80
Feb.	1-28	Dunnville Electric Light Co., Dunnville— Electric light for February, Guard lock and bridge (2),	9 33	
Mar.	1-31	56 lights, at 163c	10 33	19 66
фo	8	Rich. Leeson, Merri(ton— 1 ton No. 4 coal Delivering same to Allanburgh lock	6 50 1 00 2 75	10 25
			ľ	138 21

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of April, 1887, to pay permanent establishment, chargeable to Staff and Working Expenses.

Consistr	When	Names	Time.	Rate.	A mount
Capacity.	Employed	Names.	Time.	nate.	Amount.
Superintendent	April, 1887	William Ellis	1 month	\$ cts. 2,900 00	\$ cts. 241 67
Paymaster	do	Richard D. Dunn	1 do	1,400 00	116 67
Accountant		Jas. E. Lawrence		1,000 00 750 00	83 33
Harbor master, Port Dalhousie		Wm. Cook		750 00	62 50 62 50
do Port Colborne Overseer, Division No. 1		J. G. Demare		100 00	100 00
do do No. 2	-	Jas. Dell		75 00	75 00
do do No. 3		A. namilton		60 00	60 00
do do No. 4	do	T. R. Secord	1 do	6 5 00	65 0 0
Storekeeper, &c		W. W. Wait		65 00	65 00
Messenger, &c	do	Thos. J. Hartley	30 days	1 25	37 50
In charge of steel and iron	do	W. Chatfield	1 month	75 00	75 00
bridges, also steam pump, &c	do	W. Chatheld	month	15 00	15 00
Division No. 1.					
Port Dalhousie Ferry	i	Frank Smith	1	1 40 38 00	36 40
Master, Lock 1	1	J. M. Woodall	1 do	42 00	40 00
Assistant		George Howe		45 00 45 00	22 50
do		Thos. Williams		45 00	22 50° 22 50
Master, Bridge 1		Frank Darby		45 00	22 50
Assistant		Philip Ohnith		45 00	22 50
Master, Lock 2	do			47 00	22 50
Assistant)	Geo. Bowman		45 00	22 50
do		Bur. Merritt		45 00	22 50
Master, Lock 3	do			45 00 47 00	22 50 22 50
Assistant	do	1 T T7 .		45 00	22 50
. do		James Grogan			22 50
do	do	Con. Gorman			22 50
Master, Bridge 2		. John Flynn			22 50
Assistant		. H. Alexander			22 50
Master, Lock 4		Jos. Franklin Samuel Hopkins		1 45 00	23 50 22 50
do	do	Wm Altoft	. do	45 00	22 50
do		Jon. Woodall		45 00	22 50
Master, Lock 5		. Thomas Scott			23 50
Assistant					22 50
No		John Wilde		1 45 00	22 50
Master, Bridge 3 Assistant	do .	Geo. H. Brownlee M. Morarity		45 00	22 50 22 50
Master Lock 6		Peter Paxton			23 50
Assistant		John Daley		15 00	22 50
do		Unas. Newbold	do	45.00	22 50
do		Chas. P. Sabine			22 50
Master, Bridge 5		William Elliott			22 50
Assistant	A ===:1 100	George Spooner		47 00	22 50
Master, Lock 7			19 4	1 4 00	23 50 22 50
do		William Boyle		1 4 00	22 50
do	do .	Richard Freeman	. 🥻 do	45 00	22 50
Master, Bridge 6	do .	James W. Grant			22 50
Assistant	. do .	Alex Stewart	} do	450 00	22 50
Master, Lock 8	· do .	Nicholas Hayden		/ 45 00	23 50
Assistantdo	do .	William Reid		45 00	22 50
do	do .	Robert Secord M. McCormack		1 4 5 00	22 50
Master, Lock 9	do .	R. H. Watson.		1 47 00	
Assistant	do .	R. H. Watson Alex. Soper		4 2 00	22 50
42 3515 tall t					

PAY-LIST in duplicate of Persons employed on the Welland Canal-Continued.

Capacity.	Whe Emplo		Names.	7	'ime		Rate	·	Amount.
Division No. 1—Con.							\$	cts.	\$ cts.
Assistant	April,	1887	Alex. Bradt) n	ontl	ıj	45	1	22 50
Master, Bridge 7	do	•••	James Whitten	2	do		45		22 50
Master, Lock 10	do		James Bradley		do]	47 4 5		23 50
Assistant do	do do	•••	James Mulvey Henry Hare	2	do do		45		22 50° 22 50
dodo	do	•••	Thomas Nelson	3	do		45		22 50
Master, Bridge 8	dò	•••	Arthur Cairn	Ĭ	do]	45		22 50
Assistant	do	•••	John McGeachie	7	do		45	00	22 5 0
do	do		James Reynolds		ďο	1	47		23 50
_ do	do		Alex. Wilson		ďο		45		22 50
Master, Lock 12	do	•••	W P. Burleigh		do		45		22 50
Assistantdo	do	•••	James Webster Wm. Strong		do do		45 47		22 50 23 50
do	do	•••	Edward Bradley		do		45		22 50
Master, Lock 13	do	•••	Frank Mugham		do		45		22 50
Assistant	do	•••	James McBride		do		45		22 50
do	do	•••	Thos. Keating	2	do		47		23 50
do	do	•••	Joseph Turner		do		45		22 50
do	do	•••			do		45		22 50
do		•••••	Geo. Millward	2	do		45	00	22 50
Division No. 2.						Ì			
Master, Bridge 9	April,	1887	John Black	$\frac{1}{2}$ n	ont	h	45	00	22 50
Assistant	do	•••	John Clarke	2	ďο]	45		22 50
Master, Lock 14	do		Cornellus Mestor	2	do			00	23 50
Assistantdo	do	•••	Thomas Flynn		do			00	22 50
do	do do	•••	James Winton		do			00	22 50 22 50
Master, Lock 15	do	•••			do			00	23 50
Assistant	do	•••	7 30 1 3		ďo			00	22 50
do	do	•••	\$37 Y \$37'1		do		45	00	22 50
do	do	•••			do			00	22 50
Master, Lock 16	do	•••	Thomas Burley		do			00	23 50
Assistant	do	•••	7 1 77 11 1		do			00	22 50
do	do	•••	1 4 4 37		do do			00 00	22 50 22 50
do	do do	•••	200 1 2 0 2		do			00	23 50
Assistant	do		F. Shuman		do			00	22 50
do	do	***	MC 1 - 1 (1)		do			00	22 50
do	do		Michael Dooher	1	do			00	22 50
Master, Lock 18	do		James Pearson	1 2	do	•••		0 0	23 50
Assistant	do		George Newton		do	•••		00	22 50
dodo	do	•••	T		do	•••		00	22 50 22 50
Master, Lock 19	do	•••	1 -	2	do	•••			22 00
Assistant	do	•••		1	do		45	00	22 50
do	do	•••	Fred. Hoschke		do			00	22 50
do	do	•••		.		•••••			
Master, Lock 20		•••	1 36 36		do	•••		00	23 50
Assistant	do	•••			do	•••		00	22 50
do	do	•••	John Collins Thomas Freel		do do	•••		00	22 50
Master, Lock 21	do	•••	F. C. Berriman	13	do	•••		00 00	22 50 22 50
Assistant	do	•••	7 1 0 1	1	go	•••		00	22 50
do	do	•••	James Ellis	3	do			00	22 50
do	do		Adelbert Clark	- 15	do	•••		00	22 50
Master, Lock 22	do				do	•••		00	23 50
Assistant	do	•••	Wm. Hanna P. McNamara Wm. Boyle	12	do	•••		00	22 50
do	do				ďο	•••		00	22 50
do		•••	Henry Phillips	1	do	•••		00	22 50
Master, Lock 23		•••	T. Bonewell	- 2	do	•••		00	23 50
Assistant do		•••	Jas. Smerdon	. 1 🛧	do	•••		00 00	22 50 22 50
						•••		vv	. 4400

PAY-LIST in duplicate of Persons employed on the Old Welland Canal, &c.—Continued.

Capacity.	When Employed	đ	Names.	T	ime.		Rate.	An	nount
Division No. 2—Con.							\$ cts.		\$ ct
aster, Lock 24	April, 188	37	R. Campbell	₁ m	onth		47 00		23 5
ssistant			M. Henderson	$\frac{1}{2}$	do .		45 00		22 5
do		- 1			do		45 00		45 0
do			Henry Kern		do do		45 00 45 00		45 0 22 5
aster, Bridge 10 ssistant			Wm. Flemming F. Galbraith		do		45 00		22 5
aster, Lock 25	do .		F. Galbraith	Ĭ	do		47 00		23 5
ssistant	do .		Sam. Campbell	1	do		45 00		22 5
do	do .		Robt. Wright	¥ 2	do		45 00		22 5
aster, Bridge 12		•••		١.		- 1	45 00		^~ ~
ssistant	do .	•••	Robert Camp	2,	do]	45 00		22 5
aster, Guard Lock			Chas. H. Collier Samuel Fraser	ΙÝ	do do		42 00 45 00		8 4 45 0
do	1		Fred. Lavy		do		45 00	}	22 5
do	do		James Cook	1	đo		45 00		22 5
aster, Bridge 13	do		Rich. Higgins		do		45 00	1	22 5
ssistant	do .		William Upper	1	φo		45 00		45 0
Division No 4.						ł			
aster, Bridge 14	do		Daniel O'Leary	1	đo]	45 00	1	22 5
ssistant	do .	•••		1	do		40 00	1	20 0
aster, Bridge 15	· do		Bart. O'Learry	1 2	do		45 00	1	22 5
s s istant	do		Geo. Thompson		do		45 00	ļ	22 5
ort Robinson Ferry	1 2	•••	R Stevenson		ďο	1	30 00	1	15
do Lockssistant	1	•••	James Coppin		do		47 00		23 1
aster, Bridge 16			James Walsh James Edmonds		do	•••[45 00 45 00		22 1
ssistant.			Geo. P. Misner		do		45 00	1	22 3
elland Lock	1		William Welson		do		45 00		22 5
aster, Bridge 17	1 7	•••	1 6		do		45 00	1	22 1
ssistant			Luke J. Brenan	1 2	do		45 00	İ	22 4
aster, Bridge 19			Chas. Hanna		ďο	•••	45 00	1	22
ssistantumberston Ferry	do	•••	Alex Hanna	1,2	do	•••	45 00 30 00	1	22 t
aster, Bridge 21.	· do		Mich. Towynor Emil Boneberg		do	•••	45 00	ì	22
Bsistant		•••	1 to Chi. 2. 3.1		do	•••	45 00	1	22
ort Colborne Lock	1	•••	,	1 3	ďo		32 00	1	40
	1	***	John Henshaw {	1 Z	ďο	•••	42 00	13	
ssistant, Bridgedo do		•••			do	•••	42 00	1	21
do dodo		•••	John Stevens		do	•••	42 00 42 00	1	21 · 21 ·
do do		•••	Jas. Wenlap William Aikins	1	go	•••	42 00		21
ort Colborne Ferry		•••	John Bradley		ďo	•••	42 00	1	42
atching old Aqueduct, Welland					days	s	1 25	1	41
night and day	ob ·	•••	Jos. McMurray	15	do	•••	1 50	15	*1
do do	do		James Nixon	15	do do	•••	1 25 1 50	}	41
d o do	do		Robert Simpson	15 15	ďo	•••	1 25	Įį.	41
do do	do do		William Nixon	15	do	•••	1 25	11	41
40 ,,,,	" uo	•••	TILLIAM ATACH	15	do	•••	1 50	15	
	1		1	1			1	1	4.608

Da	ate.	Nature of Work.	Amount.	Total.
	387.		\$ ets.	\$ cts
A pril	1-30	To G.N.W. Telegraph Co., St. Catharines—Telegrams for month		45 98
do	1-30	C.P.R. Telegraph Co., St. Catharines—Telegrams for month		2 83
	1-30 1-30 30	G.N.W. Telegraph Co., Allanburgh—Telegrams for month G.N.W. Telegraph Co., Pt Robinson—Telegrams for month Bell Telephone Co., Pt. Colborne— Conversation from February to April 30, 1887		1 28 1 38
	1-30	Rent of instrument 6 months	12 50	14 80 7 80
·do	1–30	John Junken & Co., St. Catharines— 7 gals. coal oil, \$1.75; 1 feather duster, 85c	2 60 13 9 0 7 75 4 80 18 00	,
·do	1–30	Wm. N. Garden, Welland— 6 gals. coal oil, at 30c.; 6 rolls batton, 48c Lampwick	2 28	50 65
-do	1-30	John Mathews, Pt. Colborne— 1 cord wood, at \$5; 2 brooms, 70c.; 3 bars soap, 75c 14 gals. coal oil at 30c.; 8 boxes matches at 15c 8 burners at 20c.; 2½ doz. chimneys, \$2.50	6 45 5 40 4 10	2 33
∘do	30	Wm. T. Sawle, Welland-Welland Telegraph-1 year's		16 70
do	30	The Mail Printing Co., Toronto—Advertisement, "opening		1 00
•do do	30 30	notice" (canals)		14 70 5 08
do	1-30	of old aqueduct, Welland		4 00 16 25
A pril		To George Gibson, P L.S., St. Catharines— 1 day Registry Office, Welland, re Brown ditch Expenses, railway and meals	5 00	
ďo	27	Expenses, railway and meals	6 50 1 00	
·do	30	Plans and description, Brown's ditch	5 00	20 50
·do	21	Registry Office, Welland— Schedules, lot 29, con. 7 do lot 30, con. 7 Extract from deed, Thorburn to Queen	3 00 0 55	
·do	30	Mrs. Tuckey, Welland-Repairing two clocks		3 55 1 50
do do	29 29	Globe Printing Co, Toronto—Advertising opening canals Daily News, Kingston—Advertising opening canals		13 12 5 00
do	28	M. Y. Keating, St. Catharines—1 year's subscription Daily Courier, Buffalo		8 00
∙d o	30	Elbert Place, Agent, St. Catharines—1 map Dominion of		
do	30	R. D. Dunn, Paymaster, St. Catharines— Telegrams paid Bank of Commerce re credits, January, 50 cts.; February, 25 cts.; March, 50 cts.; April,		8 40
. نے	90	50 cts	1 75	
∘do ∘do	26 30	Paid express charges on 1 case stationery from Ottawa do Plain Dealer, Cleveland, O., advertising opening	9 50	
	i	canals	i 12 00 i	

Accounts chargeable to Welland Canal, &c -Continued.

Date.	Nature of Work.	Amount.	Total.
A pril 30	To the Chicago Inter-Ocean, advertising opening canal do Post Office orders on above advertising accounts	\$ cts. 8 00 0 30 1 50	\$ cts.
do 18 do 19 do 20 do 21-22	Conveyance along canal, paying ½ day	2 50 1 00 1 55	
do 18–22	ville and return	9 00	18 55
do 1–30	W. W. Wait, St. Catharines—Use of horse and waggon delivering stores and oils along canal		20 00 314 40

PAY-LIST in duplicate of persons employed on the Old Welland and Feeder Canal during the month of April, 1887, to pay permanent establishment and accounts chargeable to Staff and Working Expenses.

	===				===		==	
Capacity.	Wh		Names.	Ti	me.	Rate.		mount.
Capacity.	Emplo	oyed	2.000	1			-	2200
				`				
Owner	188 April		John B. Smyth	1 mc	nth	\$ cts.		\$ cts.
Overseer Master, Lock 1 and Bridge	Whin	•••••			lo	42 00		21 00
Assistant	do		R. Edgraft		lo	42 00		21 00 -
do	do		Wm. L. Smith] (lo	42 00		21 00
do	do	•••••	John House		lo	42 00		21 00
Master, Lock 2 and Bridge	do		Walter Weaver {	I 4	do	38 00 42 00	1	40 00 ~
Assistant	do		T. Johnson	1	do	42 00	•	21 00
do	do	•••••	W. H. Charles	1 d	do	42 00		21 00
do	do		John Sullivan		of	42 00		21 00
St. Paul Street Bridge	do	•••••	Wm. McClorey	2 9	do	38 00		19 00
Assistant	do		Tim. Sullivan		do	38 00 38 00	}	19 00 38 00
Assistant	do		Fredk. Sherer		lo	38 00		19 00
Master, Lock 4 and Bridge	do		James Livingston		do	42 00)	21 00
Assistant	do		James Boyle		do	42 00		21 00
Master, Locks 5, 6, 7 and Bridge	do		Robert Boyle		do	42 00	Į.	21 00
Assistant	do		Michael White		do	42 0 0	ļ	21 00
Master, Locks 8, 9, 10 and 11	do		Barney Clarke		do	38 00		19 00 -
Assistant	do	•••••	C. W. Bradley	2 '	do	38 00	1	19 00
Master, Locks 12, 13, 14, 15 and Bridge.	do		James Cogan	1	do	38 00		19 00
Assistant	do		Martin Nestor		do	38 00		19 60
Master, Locks 16, 17 and 18	do		Barnett Darby		do	38 00		38 00
Assistant	do		Robert Gibson		do	38 00	1	38 00
Master, Locks 19, 20 and 21	do		Ed. McLaughlin		do	38 00		19 00
Assistant Master, Keefer Bridge	do		Robert Bradley John McNamara		do	38 00 38 00		19 00 19 00
Assistant	do		A. W. Bradley		do	38 00		38 00
	۱ .				do	38 00	1	
Master, Locks 23, 24 and Bridge	do	•••••	L (do	42 00	3	40 00 ₀
Assistant	do	•••••			do	38 00		19 00
Master, Lock 25 and Guard Lock	do		John Fluellyn		do	38 00		38 00
Assistant	do		Rufus Swazzie		do	38 00 38 00		19 00- 19 00 -
Marlatt's Bridge	do		Nelson Higgins A H. Upper		do do	38 00		19 00
Allanburg Lock	do		Wm. Higgins		do	38 00	1	38 00
Assistant	do		Lewis Hosier		do	38 00	1	38 00
Allanburg Guard Lock	do		Aaron Higgins	. 1	do	38 00	1	38 00
Foreman on Banks	do	•••••	John Gearrin	1	do	38 00		38 00⋅
Feeder Division.						1	1	
Overseer	do		John E. Scott	1	do	800 00		66 67
Junction Lock			0 17 1		do	38 00		38 00
Feeder Float Bridge	do		1		do	10 00	1	5 00
Stromness Bridge	do		George Harris	. 4	d o	38 00		19 00
Port Maitland Lock	do		Michael Corcoran	1 1	do		ļ	19 00
Assistant	do		Wm. Brenen	. 1 👲	do		1	19 00
Regulating water at Dunnville	do	•••••	Chas. Thrush	, <u>, , , , , , , , , , , , , , , , , , </u>	do	38 00	_	38 00
				1		l		1,223 67

ACCOUNTS chargeable to Old Welland Canal, and Feeder Staff and Working Expenses.

Date.	Nature of Work.	Amount.
1887. ▲pril 30	Dunnville Electric Lighting Co., Dunnville.—Electric light at Swing Bridge and Guard Lock, 60 ft., at 163c	\$ cts.

PAY-LIST in duplicate of persons employed on the Welland Canal during the mouth of May, 1887, to pay permanent establishment and accounts chargeable to Staff and Working Expenses.

Capacity.	When Employed		Names.		Time.	Rate.	Amount.	
Superintendent	Vor 1	007	Wm. Ellis	ļ_,	month	\$ cts.	\$ ct	
Paymaster	do do		R. D. Dunn	li		1,400 00	116 6	
Accountant	do		J. E. Lawrence			1,000 00	83 3	
Harbor-Masters—	_				_		i	
Port Dalhousie	do		Wm. Cook		do	750 00	62 5	
Port Colborne Overseers-	do	•••	C. H. Carter	1	do	750 0 0	62 5	
Division No. 1	do		J. G. Demare	1	d o	100 90	100 0	
do 2	ďo		Jas. Dell			75 00	75 0	
do 3	do		A. Hamilton	1		60 00	60 0	
do 4	do	•••		1		65 00	65 0	
Storekeeper, &c	do	•••	W. W. Wait			65 00	65 0	
Messenger, &c In charge of steel and iron	•••••	•••••	T. J. Hartley	31	days	1 25	38 7	
bridges; also steam pump, &c	đo	•••	W. Chatfield	1	month	75 0 0	75 0	
F	""	•••	0 24 12014 1111111111	1	monun	10 00	""	
Division No. 1.								
Port Dalhousie Ferry	do		Frank Smith	26	davs	1 40	36 4	
Master, Lock 1	do		J. M. Woodall		month	42 00	42 0	
Assistant	do		George Howe			45 00	45 0	
do	do		John Paxton			45 00	45 0	
do	do		Thos. William		do	45 0 0	45 0 45 0	
Assistant	do do		Phillip Ohnith Frank Darby		do	45 00 45 00	45 0	
Master, Lock 2	do		Alph. Kelly		do	47 00	47 0	
Assistant	do		Geo. Bowman		do	45 00	45 0	
do	do		B. Merritt		do	45 0 0	45 0	
do	do		Rick. Hutton		do	45 00	45 0	
Master, Lock 3 Assistant	do		Issac Johnston		do	47 0 0	47 6	
do	do		Con Cormon		do	45 00 45 00	45 0 45 0	
do	do		James Grogan		do	45 00	45 0	
Master, Bridge 2	do	•••	John Flynn	1	do	45 00	45 0	
Assistant	do	•••	H. Alexander	1	do	45 00	45 0	
Master, Lock 4	do		Jos. Franklin		3 -	47 00	47 0	
do	do do	•••			do	45 00	45 0	
do	do	•••		i	do	45 00 45 00	45 0	
Master, Lock 5	do		Thomas Scott	ĺ	do	47 00	47 0	
Assistant		•••	John Pennington	1	do	45 00	45 0	
do	do		Thomas Jones		do	45 00	45 0	
do Master, Bridge 3	do do	•••	John Wilde G. A. Brownen		do	45 00	45 0	
Assistant	do		M. Morarity		do	45 00 45 00	45 0	
Master, Lock 6	do	•••			do	47 00	47 0	
Assistant	do		John Daley	1	do	45 00	45 0	
do	do	•••	Chas. Newbold	1	do	45 00	45 0	
do	do		W. Bowman		do	45 00	45 0	
Master, Bridge 5 Assistant	do		Wm. Elliott		do	45 00	45 0	
Master, Lock 7	do do		Geo. Spooner C. B. Hare		do	45 00 47 00	45 0 47 0	
Assistant	do		M. Sullivan		do	45 00	45 0	
do	do	•••		ļî	do	45 00	45 0	
do	do	***	R. Freeman	1		45 00	45 0	
Master, Bridge 6	do		Jas. W. Grant		do	45 00	45 0	
Assistant Master, Lock 8	do		Alex. Stewart		do	45 00	45 0	
Assistant	do do		Nich. Hayden	$\frac{1}{1}$	3 -	47 00	47 0 45 0	
do		•••	In 1 / 1 .	li	do	45 00 45 00	45 0	
do	do		M. McCormick			45 00	45 0	
Master, Lock 9			R. H. Watson			4 = 40	47 0	

PAY LIST in duplicate of persons employed on the Welland Canal, &c .- Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	
Division No. 1Con.				\$ cts.	\$ cta	
Assistant			1 month	45 00	45 00	
do	do	Jos. C. Longley	1 do	45 00	45 CQ	
do	do	Alex. Bradt	1 do	45 00	45 00	
Master, Bridge 7	do	John Cushman James Whitten	l do	45 00 45 00	45 00	
Assistant	do	Jas. Bradley.	1 do	47 00	45 00 47 00	
Assistant	do	Jas. Mulvey	1 do	45 00	45 00	
do	do	Henry Hare	1 do	45 00	45 00	
do	do	Thos. Nelson	1 do	45 00	45 00	
Master, Bridge 8	do	Arthur Cain	1 do	45 00	45 0 0	
Assistant	do	John McGeachie	1 do	45 00	45 00	
Master, Lock 11		Jas. Reynolds	1 do	47 00	47 00	
Assistantdo	do	Alex. Wilson	1 do	45 00	45 00	
do	do	W. P. Burleigh James Webster	1 do	45 00 45 00	45 00	
laster, Lock 12	do	TTY	1 do	47 00	45 00 47 00	
Assistant	do	E. Bradley	1 do	45 00	45 00	
do		F. Mughan	i do	45 00	45 0	
do	do	Jas. McBride	1 do	45 00	45 00	
Master, Lock 13	do	Thos. Keating	1 do	47 00	47 0	
Assistant		Joseph Turner	1 do	45 00	45 0	
do	do		1 do	45 00	45 0	
do	do	Geo. Milliward	1 do	45 00	45 0	
Division No. 2.						
Master, Bridge 9		John Clarke		45 00	45 0	
Assistant	do	John Black	1 do	45 00	45 0	
Master, Lock 14	do	Con. Nestor	1 do	47 00	47 0	
do		Abe. Brennan	· 1 do 1 do	45 00 45 00	45 0	
do		John Strong	1 do	45 00	45 0 45 0	
Master, Lock 15	do		1 do	47 00	47 0	
Assistant	do	1 . 3	1 do	45 00	45 0	
do	do	W. J. Wilson	1 do	45 00	45 0	
_ do	do		1 do	45 00	45 0	
Master, Lock 16	do		1 do	47 00	47 0	
Assistant		Samuel Bradley	1 do	45 00	45 0	
dodo		John Holland	1 do	45 00	45 0	
Master, Lock 17	do	200 1 1 1 1 2		45 00 47 00	45 0 47 0	
Assistant		(m (n)	1 do	45 00	45 0	
do	1 -	Michael Glynn	1 do	45 00	45 0	
do	do		1 do	45 00	45 0	
Master, Lock 18		Jas. H. Pearson	1 do	47 00	47 0	
Assistant		. Geo. Newton	1 do	45 00	45 0	
do	do	Thos. Hanna		45 00	45 0	
do		Jas. Cook	1 7 2.	45 00	45 0	
Assistant		R. Grisdale F. Johnson	1 do	47 00 45 00	47 0	
do		R. Grenville		45 00	45 0 45 0	
do	! do	F. Hoschke		45 00		
Master, Lock 20	do	. Jacob Reuter		47 00	47 (
Assistant	do	. Isaac McMann	1 do	45 00	45 (
do	do	John Collins	1 do	45 00	45 (
do	do	Thomas Freel	1 do	45 00	45 (
Master, Lock 21	do	F. C. Berriman	1 2	47 00	47 (
Assistant do		John Cole		45 00	45 (
do			1	45 00 45 00	45 (
Master, Lock 22		William Hannah	1 3	45.00	47	
Assistant	do	W. Camp.	1 do	1	45	
do	do	Hy. Phillips.	1 do	1 45 00	45	
do	do .	.Wm. Boyle	i do	1 4 2 00	45	

PAY-LIST in duplicate of persons employed on the Welland Canal, &c.—Continued.

2.	do do do do do do do do do do do do do d		John Corbett. R. Campbell. M. Henderson. T. Bradley. Hy. Kern Wm. Fleming. F. Galbraith. M. McCarthy Geo. Detter. Saml Campbell. Robert Wright.	1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 2 do	47 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00	\$ cts. 47 00 45 00 45 00 47 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00
	do do do do do do do do do do do do do d		J.s. Smerdon T. Comnarford John Corbett R. Campbell M. Henderson T. Bradley Hy. Kern Wm. Fleming F. Galbraith M. McCarthy Geo. Detter Saml. Campbell Robert Wright Robert Camp Geo. A. Thomas	1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do	45 00 45 00	45 00 45 00 45 00 47 00 45 00 45 00 45 00 45 00 47 00 45 00 47 00
	do do do do do do do do do do do do do d		T. Comnarford. John Corbett. R. Campbell. M. Henderson. T. Bradley. Hy. Kern. Wm. Fleming. F. Galbraith. M. McCarthy. Geo. Detter. Saml Campbell. Robert Wright. Robert Camp. Geo. A. Thomas.	1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do	45 00 45 00 47 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00	45 00 45 00 47 00 45 00 45 00 45 00 45 00 47 00 45 00 47 00 45 00
	do do do do do do do do do do do do do d		John Corbett R. Campbell M. Henderson T. Bradley Hy. Kern Wm. Fleming F. Galbraith M. McCarthy Geo. Detter Saml. Campbell Robert Wright Robert Camp Geo. A. Thomas	1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do	45 00 47 00 45 00 45 00 45 00 45 00 45 00 47 00 45 00 45 00 45 00	45 00 47 00 45 00 45 00 45 00 45 00 47 00 47 00 45 00
	do do do do do do do do do do do do do d		R. Campbell M. Henderson T. Bradley Hy. Kern Wm. Fleming F. Galbraith M. McCarthy Geo. Detter Saml Campbell Robert Wright Robert Camp Geo. A. Thomas	1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do	47 00 45 00 45 00 45 00 45 00 45 00 47 00 45 00 45 00 45 00	47 00 45 00 45 00 45 00 45 00 45 00 47 00 45 00 45 00
	do do do do do do do do do do do do do d		M. Henderson T. Bradley Hy. Kern Wm. Fleming F. Galbraith M. McCarthy Geo. Detter Saml. Campbell Robert Wright Robert Camp Geo. A. Thomas	1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do	45 00 45 00 45 00 45 00 47 00 45 00 45 00 45 00	45 00 45 00 45 00 45 00 47 00 45 00 45 00
	do do do do do do do do do do do do do d		Hy. Kern	1 do 1 do 1 do 1 do 1 do 1 do 1 do 2 do	45 00 45 00 45 00 47 00 45 00 45 00 45 00	45 00 45 00 45 00 47 00 45 00 45 00
	do do do do do do do do do do do do do d		Wm. Fleming F. Galbraith M. McCarthy Geo. Detter Saml. Campbell Robert Wright Robert Camp Geo. A. Thomas	1 do 1 do 1 do 1 do 1 do 1 do 1 do 2 do	45 00 45 00 47 00 45 00 45 00 45 00	45 00 45 00 47 00 45 00 45 00
	do do do do do do do do do do do do do d	•••	F. Galbraith M. McCarthy Geo. Detter Saml Campbell Robert Wright Robert Camp Geo. A. Thomas	1 do 1 do 1 do 1 do 1 do 1 do	45 00 47 00 45 00 45 00 45 00	45 00 47 00 45 00 45 00
	do do do do do do do do do do		M. McCarthy	1 do 1 do 1 do 1 do 1 do	45 00 45 00 45 00	45 00 45 00
	do do do do do do do do	•••	Saml Campbell Robert Wright Robert Camp Geo. A. Thomas	1 do 1 do 1 do 2 do	45 00 45 00	45 0 0
	do do do do do do	•••	Robert Wright Robert Camp Geo. A. Thomas	1 do 1 do 1 do	45 00	
	do do do do do	•••	Robert Camp Geo. A. Thomas	1 do		40 00
	do do do do do	•••	Geo. A. Thomas	⅓ do	70 00 1	45 00
	do do do do	•••		1 7 3.	45 00	22 50
••• ••• •• •• •• •• •• •• •• •• •• •• •	do do	•••	Dames Willion	1 do	47 00	47 0 0
••• •••••	. do		Samuel Fraser		45 00	45 00
••••••••	do		Fred. Lay James Cook		45 00 45 00	45 00
•••••		•••	TO 1 1 TT 1	1 do	45 00	45 00 45 00
3.	do		TIT'IL' TT		45 00	45 00
	May, 1	.887.	Daniel O'Leary	1 month.	45 00	45 00
			George A. Upper		40 00	40 00
•••••			Bart. O'Leary		45 00	45 00
						45 00
						30 00 47 00
				1 - 3	45 00	45 00
			James Edmonds		45 00	45 00
• • • • • • • • • • • • • • • • • • • •	do	•••	Geo. P. Misner	1 do	45 00	45 00
1 .				1	1	
	Mav. 1	887	William Wilson	1 month.	45 00	45 00
		•••			45 00	45 00
					45 00	45 00
						45 00
				1		45 00 30 00
					45 00	45 00
	. do	•••	Isaac Shisler	1 do	45 00	45 00
	. do			1 1	42 00	42 00
3.	1 4.			ايدا		42 00
	1 3 -			1 1 1		42 00 42 00
•	1 3 -			1 1 2 1		42 00
•••••	do				42 00	42 00
		•••	James McMurray	31 days	1 50	4 6 50
do			Dobt Sime			10 50
40		•••	James Nivon	31 40		46 5 0 46 50
3 -	1 .	•••	William Nixon	31 do	1 50	46 50
١.						
inery con-	-Мау, 1	887.	Samuel Houston	26 days	2 00	52 00
Gates and	1}					
				[
3 -	do.	•••				
	d Bridge, do de de Gates and per orde	do do do do do do do do do do do do do d	do	do George Thompson do R. Stevenson do George Thompson R. Stevenson do James McCoppin James Walsh do James Edmonds Geo. P. Misner do Geo. P. Misner do James Foster do Luke J. Brenen do Chas. Hannah do Alex Hannah do Michael Traynor do Emil. Bonabery do John Cook John Stevens do John Stevens do John Stevens do John Bradley do John Bradley James McMurray do James McMurray do James McMurray do James McMurray do James McMurray do James McMurray Samuel Houston Gates and per order		

PAY-LIST in duplicate of persons employed on the Welland Canal, &c .- Continued.

Crpacit	у.		When Employe		Names.	Time.	Rate.	Amount.
nected with Loc Waste Weirs in throughout Divi	nachinery ck Gates proper c	and order		37.	John McMillan	31½ days	\$ cts. 2 00	\$ cts. 63 00
night and day. do do Diver	do do	•••	do do do	•••	Thos. Ryan	26¾ do	1 75 1 50 2 00	56 44 40 13 61 00
								8,258 89

Accounts chargeable to Welland Canal, Staff and Working Expenses.

Date.	Name of Work.	Amount.	Total.
1887. May 1	To G. N. W. Telegraph Co., St. Catharines—Telegrams for	\$ cts.	\$ cts.
do 31	Bell Telephone Co., Welland-Conversation and messages		
do 1-31 April 14	from April 1 to May 31, 1887		10 60 9 30
May 2 do 1-31	Advertising water drawn out	5 0 0 1	
do 1-31	William Chelew, St. Catharines—179 galls. coal oil at 26c. Wm. N. Garden, Welland—		22 90 46 54
	38 galls. American coal oil at 30c	11 40 2 10 1 83 3 00	
do 1-31	John Mathews, Port Colborne— 23 galls. American coal oil	6 90 75	18 33
do 1-31	E. F. Dwyer, G. N. W. Telegraph Co., Port Dalhousie-		7 65
do 1-31	To A. Thompson, Welland—4? weeks board and lodgings for O. H. Carter in charge of Old Aqueduct at Welland,	3 63	8 63
do 1-31	at \$4.00		17 71
	delivering stores and coal oil along canal To R. D. Dunn, Paymaster, St. Catharines—		20 00
do 18 do 19	Horse and buggy, 1 day, paying men and accountdo do do \$2.50; Expenses, assistant and	2 50	
	horse, \$1.25	3 75	
do 20 do 23-24	Railway fare and cab hire, Welland and returndo do Dunnville do	1 65 3 00	
do 25-24 do 30	Fare and expenses, Toronto and return, paying accounts 3 days' board and lodging during the month away from	3 80	
	home, paying men and accounts, at \$3.00		
	To Grand Trunk Railway Co., St. Catharines-		23 70
April 15-30		22 50	
	1 month, 1 man, railway bridge, St. Catharines, at \$45.00 2 month each, 4 men, railway bridge, Thorold, at \$45.00 1 do 8 do do St. Catharines and	45 00	
	Thorold, at \$45.00	360 00	427 50
		1	625 76

PAY-LIST in emplicate of persons employed on the Old Welland Canal and Feeder during the month of May, 1887, to Permanent Establishment, chargeable to Staff and Working Expenses.

Capacity.	Wh Empl		Names.	Tim	е.	Rate	o.	Amour	at.
							cts.	\$	cts
Overseer			John B. Smyth		th	100		100	
Master, lock 1 and bridge	do		Sam Duffin	do		42		42	00
Assistant	do		Robert Edgraft	do		42			00
do	do		Wm. L. Smith	do	•••	42			00
Magtan look 2 and bridge	do	•••	John House	do		42			00
Master, lock 2 and bridge	do	•••		do		42			00
do	do	•••	T. Johnson W. H. Charles	do	•••	42 42			00
do	do	•••	John Sullivan	do		42			00
St. Paul Street Bridge	do	•••	Wm. McClorey	do do		38			00
Assistant	do	•••		do		38			00
Master, lock 3	do	•••	Alex. Walker	do	•••	38	77 1		00
Assistant	do		Fred Sherer	do		38			00
Master, lock 4 and bridge	do		Jas. Livingston	do		42			00
Assistant	do		James Boyle	do		42			00
Master, locks 5, 6, 7, and bridge	do	•••	n	do		42			00
Assistant	do	•••		do		$\tilde{42}$			00
Master, locks 8, 9, 10 and 11	do	•••	D 01 1	do		38			00
Assistant	do	•••	C. W. Bradley	do		38	00		00
Master, locks 12, 13, 14, 15 and			-						
bridge	do		James Cogan	do		38	00	38	00
Assistant	do		Martin Nestor	do		38	00		00
Master, locks 16, 17, 18	do	•••	Barnett Darby	do		38	00		00
Assistant	do	•••	Robert Gibson	do		38	00	38	00
Master, locks 19, 20 and 21	do		Ed. McLaughlin	do		38	00	38	00
Assistant	do		Robert Bradley	do		38	00	38	00
Master, lock 22 and Keefer bridge	do		John McNamara	do		38	00	38	00
Assistant	do	•••	A. W. Bradley	do		38	00	38	00
Master, locks 23, 24 and bridge	do		John Neil	do		42			00
Assistant	do		D. Ryckman	go	••••	38			00
Master, lock 25 and guard lock	do		John Fluellyn	do		38			00
Assistant	do		Rufus Swazzie	do	•••]	38			00
Hurst's bridge	do		Jacob Renter	do	•••[38			00
Marlatt's do	do		Nelson Higgins	do	•••	38			00
Allanburg bridgedo lock	do		A. H. Upper	do		38			00
Assistant	do do		Wm. Higgins	do	••••	38			00
Allanburg guard lock	do		Lewis Mosier Aaron Higgins	do do	•••	38 38			00
Assistant	do		Oscar Upper	do	•••	38			00
Foreman on banks	do		John Gearin	do		38			00
Feeder Division.				i					
Overseer	May, 1	887	John E. Scott	do		800	00	66	67
Junction lock	do	•••	Geo. Hannah	do		38			00
Feeder Flout bridge	do		John Henderson	do		10			00
Stromness do	do		George Harris	do		38			00
Port Maitland lock	do		Michael Corcoran	do		38	00	38	00
Assistant	do	•••	Wm. Brennan	do	•••	38	00	, 38	00
Regulating water, &c., Dunn-	1 .			l			- 1		
ville	do	•••	Chas. Trush	do		38	00	38	00
	l						ĺ	1,862	67

ACCOUNTS Chargeable to Old Welland and Feeder Canal.

Date.	Nature of Work.	Amount.	Total.
1887. May	To Wm. Chelew, St. Catharines—33 gallons coal oil, at 23c	\$ cts.	\$ cts.
do	To Dunnville Electric Light Co., Dunnville—62 lights for guard lock and swing bridge		10 34
do	To W. F. McCartney, G. N. W. Telegraph Co., Thorold—Telegrams from March to date		4 75
do	To James Wilson, Thorold—10 gallons coal oil, \$2.50; 11 gallons lard oil, \$11		13 50
	Total		36 18

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of June, 1887, to pay Permanent Establishments and Accounts chargeable to Staff and Working Expenses.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Super- annuation
Superintendent	do	Wm. Ellis R. D. Dunn J. E. Lawrence	1 do	\$ cts. 2,900 00 1.400 00 1,000 00	\$ cts. 241 66 116 66 83 34	\$ cts. 14 50 7 00
Harbor Masters.						
Port Dalhousie Port Colborne		Wm. Cooke C. H. Carter		750 00 750 00	62 50 62 50	3 75 3 75
Overseers.						
Division No. 1	do do do do	A. Hamilton T. R. Secord	1 do 1 do 1 do	100 00 75 00 60 00 65 00 65 00 1 25	100 00 75 00 60 00 65 00 65 00 37 50	6 00 3 60
Division No. 1.	do	W. Chatfield		75 00	75 00	
Port Dalhousie Ferry Master, Lock 1	do do do do do do do do do	Frank Smith	I month 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do	45 00 45 00 45 00 45 00 47 00 45 00 45 00	36 40 42 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00	1 55 1 40 1 40
Assistant do do Master, Bridge 2	do	James Keys Con. Gorman James Grogan John Flynn	1 do 1 do	45 00 45 00 45 00	47 00 45 00 45 00 45 00 45 00	1 40
Assistant			do	45 00	45 00	1

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c .- Continued.

Capacity.	When Employ		Names.	Time.	Rate.	Amount.	Super- annuation
Division No. 1-Con.					\$ cts.	\$ cts.	\$ cts.
Master, Lock 4	June, 1	887	Jes. Franklin	1 month	47 00	47 00	1
Assistant	do		Samuel Hopkins		45 00 45 0 0	45 00 45 00	
do	do do	•••	Wm. Altoft	1 do	45 00	45 00	1
faster, Lock 5	do		Thos Scott		47 00	47 00	
Assistant	do	•••	Jno. Pennington	1 do	45 00	45 00	
do	do		Thomas Jones		45 0 0	45 00 45 0 0	1
do	do do		John Wilde G. H. Brownlee	l do	45 00 45 00	45 00	
Assistant	do		M. Morarity		45 00	45 00	
laster, Lock 6	do		Peter Paxton		47 00	47 00	l
Assistant	do	•••	John Daley		45 00	45 00	
do	do	•••	Chas. Newbold		45 00	45 00 45 00	
do	do do	•••	W. Bowman Wm. Elliott		45 00 45 00	45 00	
Assistant	do	•••	Geo. Spooner		45 00	45 00	1
laster, Lock 7	do	• • • •	C. B. Hare	1 do	47 00	47 00	l .
Assistant	do	•••	M. Sullivan		45 00 45 00	45 00 45 00	
do	do	•••	Wm. Boyle R. Freeman		45 00 45 00	45 00	1 40
Aaster, Bridge 6		•••	T 107 Change		45 00	45 00	1 10
Assistant	do	•••	Alex. Stewart	1 do	45 00	45 00	ļ
Iaster, Lock 8	do	•••	Michael Hayden		47 00	47 00	
Assistant		•••	Wm. Reid Robt. Secord		45 00 45 00	45 00 45 00	
do	do	•••	M. McCormick		45 0 0	45 00	
laster, Lock 9	1 -	•••	R. H. Watson		47 00	47 00	Ì
Assistant		•••	Geo. Millward	1 do	45 00	45 00	İ
do		•••	Jos. C. Longley		45 00	45 00	
do		•••	Alex. Bradley Jas. Whitten		45 00 45 00	45 00 45 00	1
Assistant			Jno. Cushman		45 00	45 00	
Master, Lock 10			James Bradley		47 00	47 00	1 46
Assistant	do	•••	James Mulvey	1 do	45 00	45 00	1 40
do		•••	Henry Hare		45 00 45 00	45 00 45 00	1 40
do		•••	Thos. Nelson		45 00	45 00	1
Assistant		•••	T M A 1'		45 00	45 00	1
Master, Lock 11		•••	James Reynolds	1 do	47 00	47 00	
Assistant		•••	Alex. Wilson		45 00	45 00	1 40
do		•••	W. P. Burleigh James Webster	l do	45 00 45 00	45 00 45 00	
Master, Lock 12		•••		1 do	47 00	47 00	1 46
Assistant	do	•••	E. Bradley	1 do	45 00	45 00	
do		•••	F. Mughan		45 00	45 00	ı
do		•••	Mhas Landina		45 00 47 00	45 00 47 00	
Master, Lock 13 Assistant		•••	T Marrian		45 00	45 00	
do		•••	Alex. Soper		45 00	45 00	}
do	. do	•••	John Lewin		45 00	45 00	
Division No. 2.							
Master, Bridge 9	June	1887	Peter Second	1 month	45 00	45 00	1
Assistant			Jno. Black		45 00	45 00	1
Master, Lock 14	. do	•••	Con. Nestor	1 do	47 00	47 00	
Assistant			John Strong			45 00	
do			Ab. Brennan			45 00 45 00	1 40
do Master, Lock 15			Thos. Flynn		1 4 7 00	47 00	1 4
Assistant			James McAuley		l	45 00	1 - "
do	. do	•••	W. J. Wilson	1 do	45 00	45 00	t
do		•••	Robt. Boyle	1 do	4 17 00	45 00	1
Master, Lock 16	do	•••	Thomas Burley	l do	47 00	47 00	i .

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c.—Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Superan- nuation.
Division No. 2.				\$ cts.	\$ cts.	\$ ets.
Assistant	June, 1889	Sam. Bradley	1 month	45 00	45 00	
do	do	Jno. Holland	1 do	45 00	45 00	
do	do	Michael Coad-		45 00 47 00	45 00 47 00	9 84
Assistant	do	F. Snuman		45 00	45 00	Į.
do	do	Michael Glynn	1 do	45 00	45 00	į
Marker Tank 10		W. Gulbraith J. H. Pearson	1 1 1	45 00 47 00	45 00 47 00	
Master, Lock 18		Geo. Newton		45 00	45 00	
do	do	Thos. Hanna	1 do	45 00	45 00	İ
do		Joseph Cook		45 00	45 00	1
Master, Lock 19 Assistant		R. Grisdale F. Johnson	1 do	47 00 45 00	47 00 45 00	
do		F. Horsche	1 do	45 00	45 00	ļ
do	do	R. Grenville	1 do	45 00	45 00	
Master, Lock 20		Jacob Renter		47 00	47 00	
Assistantdo		Isaac McMann John Collins	1 do	45 00 45 00	45 00 45 00	1 40
do		Thos. Freel	1 do	45 00	45 00	1 40
Master, Lock 21	do	F. C. Berrimen	1 do	47 00	47 00	
Assistant		John Cole	1 do	45 00	45 00	1
do	do	James Ellis		45 00 45 00	45 00 45 00	
Master, Lock 22		Wm. Hannah		47 00	47 00	l
Assistant	do	Wm. Camp		45 00	45 00	1
dodo	do			45 00 45 00	45 00 45 00	
Master, Lock 23		m n 11		47 00	47 00	Į.
Assistant	do	James Smerdon	1 do	45 00	45 00	i
do	do	Taba Cambass	3	45 00	45 00	1 40
Master, Lock 24	do	D Clamphall		45 00 47 00	45 00 47 00	1 40
Assistant		M II		45 00	45 00	
do	do			45 00	45 00	
Moster Bridge 10	d o	Henry Kerms		45 00	45 00	
Master, Bridge 10 Assistant	do	B O 11 141.		45 00 45 00	45 00 45 00	1
Master, Lock 25		16 16 (1 1)		47 00	47 00	1 46
Assistant	do	. Geo. Detlor		45 0 0	45 00	
dodo		. Sam. Campbell Robert Wright		45 00 45 00	45 00 45 00	
Master, Bridge 12		Geo. A. Thomas		45 00	45 00	1
Assistant	do	. Robert Camp	1 do	45 00	45 00	
Master, Guard Lock				47 00 45 00	47 00 45 00	1 40
do		C 1 To		45 00 45 00	45 00	1 10
do	do	T 0 1		45 00	45 00]
Master, Bridge 13				45 00	45 00	1 40
Assistant	do	. William Upper	1 do	45 00	45 00	
Division No. 3.						
Master, Bridge 14	do			45 00	45 00	1 40
Assistant	do	Geo. A. Upper		40 00	40 00	1 10
Master, Bridge 15	3 -	Bart. O'Learry Geo. Thompson	11 3 -	1 4- 00	45 00 45 00	1 40
Assistant Port Robinson Ferry		R. Stevenson			36 00	1 40
do Lock	do	. James McCoppin	1 do	47 00	47 00	1 46
Assistant		James Walsh			45 00	1 40
Master, Bridge 16 Assistant		James Edmonds Geo. P. Misner		45 00 45 00	45 00 45 00	1 40
49 <i>d</i> —1∪ 1	1 40	147	.,	. 20 00	25 50	-

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c .- Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Superan- nuation.
Division No. 4.				\$ cts.	\$ cts.	\$ cts.
Master, Welland Lock	do do do do do do do do do do do do	William Wilson James Foster Luke J. Brennan. Chas. Hannah Alex. Hannah Michael Traynor Emil Boneberg Isaac Shisler John Henshaw John Stevens John Stevens William Aikens J. Dunlap John Bradley Joseph McMurray. Robert Simpson William Nixon James Nixon	1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 2 do 3 do 3 do days 3 do	45 00 45 00 45 00 45 00 45 00 45 00 45 00 42 00 42 00 42 00 42 00 1 50 1 50 1 50	45 00 45 00 45 00 45 00 45 00 45 00 45 00 42 00 42 00 42 00 42 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00 45 00	1 40 1 40 1 40 1 40 1 55 1 31 1 31 1 31 1 57
MACHINISTS. Divisions Nos. 1 and 2. Keeping machinery connected with lock gates and waste weirs in proper order throughout Divisions Nos. 1 and 2 — Night	do do do	Samuel Houston William Mossip John McMillan The McMillan J. H. Booth, h.&w. Ed. Smiley	25 do 35 do 35 do 32 do	2 00 2 00 2 00 1 75 1 50 2 00	51 00 51 00 71 00 62 12 48 00 50 00	. 99 34.

ACCOUNTS chargeable to Welland Canal, Staff and Working Expenses.

D	ate.	Nature of Work.	Amount.	Total.
_ 18	387.	The second secon	\$ cts.	\$ cta
June	1–30	To G. N. W. Telegraph Co., St. Catharines—Telegrams for June, 1887		5 83
do	1-30	G. N. W. Telegraph Co., E. F. Dwyer, agent, Port Dal- housie—Telegrams for June. 1887		1 78
do	30	C.P. R. Telegraph Co., St. Uatharines—Telegrams for May and June, 1887		2 24
do	30	Henry Mussen, Allanburgh— Telegrams, May and June, 1887	1 08	
do	1-20	Pen holders and ink, 15 cts.; envelopes and stamps Repairing clock	0 45	
do	15–17	34 gals. coal oil, at 30 cts.; 1 gal. lard oil, at \$1	2 13	4 66
do	1-30	Bell Telephone Co., Welland—Conversations during month of June		6 10
do	30	St. Catharines Post Office, St. Catharines-Box rent to	***************************************	.0
		Jan. 1, 1888 Welland Post Office, Welland—	. 4	5 00
do	30	Post office box, Jan. 1, 1887, to Jan. 1, 1888 Postage stamps	2 00 1 20	
		L. G. Carter, Port Colborne-Postage and postal cards,		3 20
do	30	3 months ending June 30, 1887		5 72
do	1-30	24 gals. coal oil, at 30 cts	7 20	17
		Paid repairing boat	1 00 3 25	
		1 box matches	0 15	11 60
do	1-30	John Mathews, Port Colborne— 19 gallons coal oil	5 70	
		ł gallon lard oil	0 25	5 95
April June	1 30	 Wm. Pike, Thorold—2,440 lbs coal, at \$6.50 per ton J. G. Demare, Overseer Division No. 1, Port Dalhousie—Use of horse and waggon in connection with duties of 		7 93
		overseer, 3 months ending June 30, 1887, at \$150 per annum.		37 50
do	30	James Dell, Overseer Division No. 2, Thorold— Use of horse and waggon in connection with duties of overseer, 3 months ending June 30th, 1887, at \$150 per		
		annum	37 50 24 00	
		5 months rent of nouse, at po		GI 50
		A. Hamilton, Overseer Division No. 3, Port Robinson-	24.00	
do Mar.	30 22	3 months' rent of house, at \$8	24 00 0 50	
	ļ	Paid for repairs to pump on pile driver	0 35 0 20	
do June	22 30}	Postage and wrappers	0 66	A# =-
		Thos. R. Secord, Overseer Division No. 4, Port Colborne-		25 71
April June	1 30	1 railway fare, St. Catharines and return	1 20 20 70	
		25 do Air Line do at 25c 5 do Bertie do at 50c	6 25 2 50	
		2 40 22222		30 65
do	30	Grand Trunk Railway Company, St. Catharines—Wages for 8 railway bridge tenders, St. Catharines and Thor-		
ob	1–30	old, 1 month each, at \$45		360 00
uu	1-30	for delivering supplies to and from store house		20 00

Accounts chargeable to Welland Canal, &c .- Continued.

Da	ate.	Nature of Work.	Amount.	Total.
1	887.		\$ cts.	\$ cts.
	13	To N. H. Irvin & Co.—1 copy City of St. Catharines and Co of Lincoln Directory		2 00
	•••••	Adv., notice openings canals, 3 days Printing 500 Notices to Mariners	6 00 3 50	9 50
	30 1–30	The Toronto World, Toronto—Adv. Notices to Shippers The Journal Printing Co., St. Catharines—Adv. list of		7 50
do	1-30	vessels passing through Lock 7, New Canal, 244 at 4c. B. C. Fairfield, St. Catharines— Postage stamps	1	9 76
do	3 0	2 pencil sharpeners		9 05
	ı	June 30, 1887, as charwoman at the Welland Canal office, at \$100 per annum		25 00
do do	20 21 21	Horse and buggy, paying employees and accounts, 1 day do do do 1 do Expenses assistant and horse, &c	2 50 2 50 1 15	
do	22 23–24	Railway and hack fares, Welland and returning do do Pt. Colborne, Dunnville and	1 65	
đo	20–25	return	3 00	
do	30	A. Thompson, Welland—4 weeks' and 2 days' board and lodging for C. H. Carter, in charge of aqueduct at		19 80
do	30	Welland		17.14
		allowance for expenses, fares, &c	<u> </u>	75 00
				770 12

PAY-LIST in duplicate of persons employed on the Old Welland and Feeder Canal during the month of June, 1887, to pay Permanent establishments and Accounts, chargeable to Staff and Working Expenses.

Capacity.	When Employe	d	Names.		Time.	Rate.	Amount.	Super- annuation
		-		_		\$ cts.	\$ cts.	\$ cts.
Overseer	June, 18	87	John B. Smyth	1	month	100 00	100 00	6 00
Master, Lock 1 and Bridge		•••	Saml. Duffin	1	do	42 00	42 00	1 31
Assistant	-		Wm. L. Smith	1	do	42 00	42 00	1 31
do	do		Robt. Edgraft		do	42 00	42 00	1 31
do	d o	•••	John Hoase	1	do	42 00	42 00	1
Master, Lock 2 and Bridge		•••			₫o	42 00	42 00	over 35 yrs
Assistant	do	•••	T. Johnson	1	do	42 00	42 00	1 31
do	do	•••	W. H. Charles	1	do	42 00	42 00	1 31
do			Jno. Sullivan		do	42 00	42 00	1 31
St. Paul Street Bridge			Wm. McClorey		do	38 00	38 00	1 19
Assistant Master, Lock 3			Tim Sullivan Alex. Walker		do	38 00 38 00	38 00	1 19
Assistant		•••	Fred. Sherer.	1	3 -		38 00	1 19
Master, Lock 4 and Bridge			James Livingston		do	38 00 42 00	42 00	1 31
Assistant			James Boyle		4. ""	42 00	42 00	1
Master, Locks 5, 6, 7 and	4.0	•••		1	uo	1 22 00	1 22 00	
Bridge	do		Michael White	1	do	42 00	42 00	1 31
Assistant.	do		Robert Boyle	1	do	42 00	42 00	1 31
Master, Locks 8, 9, 10 & 11.	do		Barney Clarke	1	do	38 00	38 00	1 19-
Assistant	do	•••	C. W. Bradley	1	do	38 00	38 00	1 19
Master, Locks 12, 13, 14, 15			"			ĺ	1	İ
and Bridge	do	•••	James Logan	1	do	38 00	38 00	1 19
Assistant			Martin Nester		do	38 00	38 00	1 19
Master, Locks 16, 17 and 18.	do	•••	B. Darby	1	do	38 00	38 00	1 19
Assistant	do	•••	R. Gibson	1	do	38 00	38 00	1 19
Master, Locks 19, 20 and 21.			E. McLaughlin		do	38 00	38 00	1 19
Assistant	do	•••	Robt. Bradley	1	do	38 00	38 00	1 19
Master, Lock 22 and Bridge	3.		Talon Wallamana	,	4.0	20.00	20.00	
Keeper			John McNamara		do	38 00 38 00	38 00	1 19
Assistant	do	•••	A. W. Bradley	1	αο	30 00	30 00	1 19
Master, Locks 23, 24 and	do		John Neil	1	do	42 00	42 00	1 31
Bridge Assistant			D. Ryckman		do	38 00	38 00	1 19
Master, Lock 25 and Guard	uo	•••	D. Rycaman	_	uo	-0000	00 00	' '
Lock	do		John Fluellyon	1	do	38 00	38 00	1
Assistant			Rufus Swazzie		do	38 00	38 00	1 19-
Hurst's Bridge			Jacob Renter		d o	38 00	38 00	1 19
Marlatt's Bridge	do	•••	Nelson Higgins	1	do	3 8 00	38 0 0	1 19
Allanburg do	do		A. H. Upper	1	do	38 00	38 00	1 19
do Lock	do .	• • •	Wm. Higgins	1	do	38 00	38 00	over 35 yrs
Assistant	do .	•••	Lewis Mosier	1	do	88 00	38 00	1 19
Allanburg Guard Lock	do .	•••	Aaron Higgins	1	do	38 00	38 00	over 35 yrs
Assistant	do .	•••	Oscar Upper	1	do	38 00	38 00	
Foreman on banks	do .	•••	John Gearin	1	do	38 00	38 00	1 43
Feeder Division.						}		
0	٥.		T. L. T. C	,	do.	900 00	60 60	
Overseer			John E. Scott		do	800 00 38 00	66 66	4 00
Junction Lock Feeder Float Bridge			Geo. Hannah		do	10 00	10 00	1 43
Stromness do			John Henderson George Harris		3	38 00	38 00	1 19
Port Maitland Lock			Michael Corcoran		do	38 00	38 0 0	1 19
Assistant	do		W. M. Brenan	ī	do	38 00	38 00	1 .13
Regulating water at Dunn-		•••		-		1	30 00	
ville	do .		Chas. Thrush	1	do	38 00	38 00	over 35 yrs
					•••	1		

A. 1889

Accounts chargeable to Old Welland and Feeder Canal, Staff and Working Expenses.

Da	te.	Nature of Work.	Amount.	Total.	
June	87. 30	To John B. Smyth, Overseer, Merritton— Use of horse and waggon in connection with duties of	\$ cts.	\$	cts.
		overseer, 3 months ending June 30th, 1887, at \$150 per annum	37 50 24 00	61	60
do	30	John E. Scott, Overseer, Dunnville, use of horse and waggon in connection with duties of overseer, 3 months ending June 30th, 1887, as per original account		35	25
do	30	Dunnville Electric Light Co., Dunnville, lighting swing bridge and guard lock, 60 lights, 103.		10	00
do	30	G. N. W. Telegraph Co., Dunnville, telegrams from January 15th, 1887, to June 20th, 1887		9	56
				\$116	31

RENEWALS AND REPAIRS.

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of July, 1886, to pay Carpenters, Laborers, Teams and accounts, chargeable to Renewals and Repairs.

		=	====	-							=
Сарас	eity.		When Employe		Names.	Time.	Rat	е.	Aı	noun	ı t.
Debuild forms seen		1)				\$	cts.		\$	cts.
Rebuild ferry scov	on locks a	ndl									
bridges; makin	ig and putti	ng		1		1	l				
up desks; collec	tors' new offic	ce,		ı		l		1			
making tank for approach to brid							l				
1, &c., &c			July, 188	6.	H. Vanderburgh	1 month	75	00		75	00
do	do		ao .	•••	Geo. C. Holmes	126 days	2	25		58	00
do	do		do .	•••	Wm. M. Jones	27 do		00		54	
d o d o	do do		do . do .	•••	James Hindson	284 do		00		57 57	
do	do				Wm. Patterson C. Demare			00		54	
do	do				Alf. Coons					50	
do	do		do .		Jno. Sheltes, team		3	00		85	50
Watchman, gate,	yard shop Pe	ort	3.		O		• • • •			20	m P
Dalhousiedo	lo Lock 13	;···	do . do .	•••	Oscar Sharp Jno. McMillan			00 00		38 37	
	lo do	' …			Henry Hughes			00		37	
Helping to rebuild		re-				1	1				
pairing wheelbs	rrows, painti	ng					1				
bridges, caulki		w,			W:11: W!-	07 1	١ .			= 4	
&cdo	do	••••		•••	William Mossip John House	27 do		00 75		22	00 75
do	do	•••			Richard Marshall		1	75			25
do	do	•••	do	•••	John Doig	271 do]	621			28
do	ġο	•••	do	•••	Robert Johnson	27 do	1	$62\frac{1}{2}$			88
do	do	•••	do	•••	John Howe	3 do	1	25	ĺ	3	75
Opening up dito	спев; buildi Nelles fari	шg				İ			l		
taking down var											
old office; putt						1	1		1		
crete under flo	or of oversee	r's				1					
house, and putt		ain	٠		Con Roid foromen	07 4-	l ,	75	1	417	95
to same, &c		••••	Ì _	•••	Con. Reid, foreman	27 do 15 do	1 .	. 75 . 50	1		25
do	do	•••	do	•••	John Murvil	12 do		25	1	37	50
do	do	•••	do		W. Bowman	. 27 do	1 ,	25	1		75
do	ďο	•••	do		Andrew Secord			25	1		75
do	do • •bis•los •	•••	do	•••	J. Johnson, teamster.	224 do	1 3	3 00		66	75
Laborers cutting obnoxious week	inisties, a	ic.,	l			ľ	l		l		
of the Canal a									· .		
lands adjacent.		••••			J. Wilson			25			50
do do	do	•••			Peter Lewis			L 25	1		25
do	do do	•••	do do		Chas. Johnson Lewis Berry			25			25
do	do	••••			George Cox		1 .	25	}		00
d o	do	•••	do		James Parker	11 do		L 25	1		75
фo	ďο	•••			Joseph Davis	. 10 do		25	Ì		50
do	do do	•••		•••	Willis Starks Norman McLeod	1	1 :	1 25 1 25	1		75
do do	do	•••		•••		8 do	1 .	1 25 1 25	1		00
do	do	•••			W. A. McClare	7 do	1 .	25	}		75
Cutting thistles a			1.		(1) - T 1	1	1		1		. '
Government pr	operty, &c			•••	Chas. Johnson	. 27 do	1	1 75	1		25
do	do do	•••	1	•••	F. Donahue John Cole	. 10 do . 4 do		1 50 1 50	1		00
do do	do	***	1 -	•••	T. McNamara	. 4 do		1 25	1		75
do	do	•••	do		Robert Pew		1	1 25	1		75
do	do	`•••	do		William Clarke	. 20 do	.l	1 25	1		90
фo	d o	•••	i do	•••	Arthur Bradley	. 23 do	٠١	1 25	ı	28	75
					153		*				

PAY-LIST in duplicate of persons employed on the Welland Canal, &c -Continued.

Capaci	ty.		Whe Emplo		Names.		Fime		Rate	e.	A :	mou	nt.
									\$	cts.		œ	a+a
Cutting thistles an	d weeds or	n all					_	ļ	-			\$	cts.
do do	perty, &c do		July, I	1886	William Pew	18	days	اا		25 75			50
do	do	•••	do		John Higgins, W.B T. Bradley					75			75
do	do	•••	do		R. Hoover, teamster.					00			75
Cutting thistles and canal banks, bo Government land burg to Bridge fence, &c., aroun er's house, Allan	oth sides, ds from Al 16; build d Lock To	and lan- ling		•••	R. A. Booth	27	đo		1	75		47	25
do	qo	•••	do		Geo. A. Jordon			•••		25		30	63
do do	do	•••	do	•••	Jno. Madijan	25	do			25			. 88
do	do do	•••	do	•••	Geo. Brown	25	00			25 25			. 88
do	do	•••	do		Jas. Hansel Ben. Reafern			:::		25 25	l		. 2 5 . 88
do	do	•••	do		Jno. McPherson					25			19
do	₫o	•••	do	•••	George Pen, W.B	10	do			75			50
do	do	•••	do	•••	Dan Kelley, team	2 2	do		3	00		7	50
Replanking swing	bridge, &c		do	•••	Jacob Wilkerson	18	do		2	00		36	600·
Cutting thistles an sides of canal, for Welland; ditches, &c.	rom Bridg	e 16		•••	James Clancy	27	do		1	75		47	25-
do	đo	•••	do	•••	Hugh Bailey	25	do		1	25		3 1	. 25
ďο	фo	•••	do	•••		27	do			25			75
do do	do do	•••	do do		Thos. Waldron		do			25			75 25
Building kitchen, I house, Pt. Colbon floats, &c.	Lock Tend	 ler's ring	do	•••	Wm. Cook	1	do			25 75			25
do	do	•••	do	•••	J. Cook	27	do		1	50		40	50
do	do	•••	do		J. Moyer	1 4	do			50	1	36	00
do	do	•••	do	•••	J. Ryan	24	do			25)		
Cutting thistles as sides of canal and lands.	nd weeds i	both nent	do	•••	W. Deeks	27				25 25			50 75
do	do	•••	do		C. Keen					25			75
do do	do do	•••	do do	•••	E. Sloat M. Anthes	27	do do	•••		25 25			75
do	do	•••	do	•••	Sam Cook, team	31	do			00			75
Repairing Lock To and premises; re 2 and 4, also St and Locks 4 as building new brid way, Shickluna sing down old pla office, &c., and sh with tongue and ing, &c. Gate, y	pairing Lo . Paul st nd 7 brid; lge over r sawmill; t ster; clean neeting cei l grove sh	uses ocks creet ges; oad- ear- ning ling			N. Moray			•••		75			94
St. Catharines. do	do		do		P Shortell	201	đ۵	1	n	00		KO	g ga
ďo	do	•••	do		P. Shortell T. Rapsey	273	do			00			50·
do	do	•••	do	•••	S. Radcliffe	28	do		_	00			50
do	do	•••	do	•••	R. Wilson	283	do			25	Ì	35	94
2 -		•••		•••	Unas. Hill, team	27				00	ļ		. 00
do do	do	•••	do	•••	Chas. Hill, team J. W. Boyle	27 31	do do	::		00 00			0

PAY LIST in duplicate of persons employed on the Welland Canal, &c -Continued.

Сарас	ity.		Whe Emplo		Names.	Time	.	Rate	е.	Amoun	t.
Building fence al race and Lock mises, Lock 15 for bridge appro	Tenders'; digging	pre-		887.	Thos. O'Neil	27 days.			cts. 75	\$ 47	
way, cutting this	tles and w	eeds,				1	ĺ		1		
repairing floats,	&c.				W- Ob	07.1	- [-	40	
do do	do do	•••	do do	•••	Wm. Chandler John Hemphill	27 do 27 do			50 25	40 33	
ďo	do	•••	go	•••	Jas. Boyle	27 do			25	33	
₫o	фo	•••	do	•••	Wm. Assell	1151 do			25	19	
do Quarrying out stor unloading scow	with sam	e for		•••	Richard Grant Jas. Hamilton, forem'n	25 do 27½ do	:::		25 00	31 57	
Lock 15 bridge							- 1				
for new found Lock 15, &c.	iation, or	iuge,				i	1				
do	do	•••	do	•••	Jas. Reynard	23} do		1	50	35	25
do	ďο	•••	do	•••	Arthur Bradley	26 do		1	50	39	00
do	do	•••	do	•••	Pat. O'Neil	281 do			50	42	
do do	do d o	•••	do do		Jas. Faywell J. Longley				50	40 40	
do	go	•••	do	•••	John Dundas	241 do		. 1	50	36	
do	đo		do	•••	Abr. Bradley	26 do			50	39	
do	фo	•••	do	•••	Wm. Tierney, W. B	27 do			75	20	
do	do		də	•••	John Coyle, team	251 do			00	76	
Building new swin 15; repairing be down old swing 15; building ne	ridges; ta g-brid ge ,]	king Lock	do	•••	f. T. Walton	29½ do		2	75	81	12
22, &c	_		3.		G D D	07 1					
do do	₫o ₫ o	•••	do do	•••	S. R. Bradley D. S. Walton	25 do			00	50	
do	do	•••	do	•••	Ed. Smith	26 do			00	47 52	
do	do	•••	do	•••	W. Trapnell	26 do			00	52	
do	фo	•••	do	•••	Wm. Dunn	26½ do		2	00	53	
do	do	•••	do	•••	F. Shuman	28 do		1	50	42	00
DUNNVI			_		T 70.1				İ		
Repairing swing : bridges, painting			go	•••	James Edgar	27 do		. 1	50	40	50
do	do ,		do		R Mitchell	13 do		1	50	2	25
фо	ģο	•••	do	•••	John Taylor	2 do			50	3	00
do	do	•••	do	•••	John Thrush	27 do			25	33	
do Caulking flood-gat moving obstruct	ions, &c.	and	do do		John Bessey	13 do		1	25 25	1 16	25
do do	do do	•••	do	•••	E. Webber				25	13	
do	do	•••	do do	•••	Thos. Eaton, team M. A. Smith do				00	24	00
Cutting thistles an banks of Feede and Government	d weeds a		do		John Henderson		•		25	22	
do	do	•••	do		Peter Gibson	6 do		1	25	7	50
do	do	•••	do	•••	Joseph Gibson	6 do		1	25	7	50
do	do	•••	do		D. Kennard				25		50
do do	do do	•••	do do		S. E. Kennard, Michael Horton				25 25		50 50
do	go	•••	do		A. Petit				25	21	
do	фo		do	•••	F. Fritz	5 00			25		25
do	do	•••	do	•••	A. McDonald	27 do		1	00	27	00
do	do	•••	do	•••	Thos. Bessey		•••		25	10	
do do	do do	•••	do do		Robert Harris James Gamble				25 25	5 3	7,
do	do		do		J. Henderson, team				50	10	
do ,	go		go	•••	T. McDonald do				50	20	
							- 1				7

Accounts chargeable to Welland Canal, Renewals and Repairs.

Date.	Nature of Work.	Amount.	Total.
1886.		\$ cts.	\$ cts
Tuly 1-31	To Coy Bros., St. Catharines—	_	
	3 ship augers, \$335; 500 lbs. axle grease, at \$7, \$35 3 bales oakum, at \$5, \$15; 2 doz. scythe stones, \$2.40	38 35 17 40	
	550 lbs. spikes, at \$5, \$27.50; 5 galls. turpentine,	2. 20	
	at 80c, \$4	31 50	
	1 gall. shellac, \$2.75; 4 paint brushes, \$3.50	6 25	
	210 lbs. nails, at 3½c., \$7.35	10 20	
	145 galls. lubricating oil, at 60c	87 00 5 25	
	100 car bolts, \$2; 2 scrapers, \$1; 1 Yale lock, \$2.25 12 brass rings, \$1.50; 2 drawer locks, \$1	2 50	
	3 latches, 75c.; 5 door stops, 50c.; 1 packet nails, 15c	1 40	
	2 night latches and keys, \$3; 500 deck plugs, \$1.75 45 lbs. castor oil, at 15c., \$6.75; 1 brass door lock, 75c	4 75 7 50	
	1,000 feet 2½ in galvanized steel rope	190 00	
A. 191			402 10
do 1–31	8 scythes, at \$1, \$8: 3 snaths, at 90c., \$2.70	10 70	
	14 stones, at 15c., \$2.10; 4 lbs. clout nails, at 15c., 60c	2 70	
	1 keg spikes, \$6.75; 200 lbs. metallic paints, at 12½c, \$25	31 75 2 00	
	1 iron pot, \$1 50; 10 lbs. brimstone, at 10c., 50c		47 1
d o 1- 31	Henry Mussen, Allanburgh—	1 95	
	6 galls. coal oil, at 30c., \$1.80; 2 pkgs. lamp black, 15c. 3 paint brushes, \$1.15; 4 prs. strap hinges, \$1.10	2 25	
	1 large door lock, \$1.50; 50 lbs. nails, at 4c., \$2; 47 lbs.		
	spikes, at 5c., \$2.35	5 85	
	1 box matches, 15c.; 8 lights glass, at 7c., 56c.; 9 lbs. putty, at 5c., 45c	1 16	
	3 chimneys, 24c.; 5 lbs shingle nails, at 6c., 30c.; sand		
	paper, 2c Hasp and lock, 50c	0 56 0 50	
			12 2
do 1-31	W. N. Garden, Welland—	1 55	
	12 lbs. oatmeal, 50c.; 21 lbs. nails, at 5c., \$1.05	0 40	
do 1-31	John Mathema Port Colherna		1 9
uo 1-01	John Mathews, Port Colborne— 5 scythe stones, 48c. 5 lbs. manilla rope, at 12c., 60c	1 08	
	3 cakes chalk, 15c.; 1 pkg. tacks, 20c.; 100 lbs. nails,	4 65	
	\$4.50	4 85	
	2 locks, \$1.10	3 07	
	2 locks, \$1.10	4 00	
	Rings and staples, 15c.; 12 lbs. putty, at 4c., 48c.; 8	1 00	
	window fastners, 24c	0 87	
	19 lbs. manilla rope, at 11c	2 09 0 35	
			16 3
do 1–31	B. Greening & Co., Hamilton—1,000 ft. ½ in. galvanized steel rope		170
do 1-31	J. H. Stanley, Port Colborne—		
	50 rolls wall paper, at 10c	5 00 0 90	
	30 yds. border	U 30	
		5 90	
	By wall paper returned	0 66	5 2
do 1-31	George Gibson, P.L.S., St. Catharines— 3 days making measurements and staking out canal		
	boundaries, Port Colborne and Humberstone	5 00	
	Car fares and hotel expenses	4 65	19

Accounts chargeable to Welland Canal, Staff and Working Expenses .- Con.

Da	ate.	Nature of Work.	Amount.	Total.
. 18	86.		\$ cts.	\$ cts
July	31	John Allow, St. Catharines— Painting and lettering sign for Canal Office, Port Dal-	'	ψ Cus
đo	1–31	housie	11 25	13 00 17 5 0
do	8	Carroll and Carroll, Toronto-3 barrels Portland cement		8 50
d o	1-31	John Battle, Thorold— 12 barrels cement, at \$1.50	18 0 0 3 37 1 50	22 87
do	1–31	H. Marcheter, Wallanburgh—Making and putting up one patent self-acting protection gate (to protect the highway train against accidents) end of Niagara Street Bridge, New Canal	i i	75 00
do	1-31	Roger Miller, St Catharines—Patterns used in construction of New Welland Canal lock gate, hanging opening gear as per following:—1 iron thrust plate and core boxes for same, 1 iron shutter valve and core boxes for same, 1 iron bridge standard and core boxes for same, 1 large iron gear for end of crab drum, 1 iron bull wheel gear for orat, 2 iron bevelled pinions for crab, core boxes complete fer same, 1 wood frame for crab and core boxes, 1 iron journal box and core boxes, 2 hand turn tables, right and left core boxes for same, 2 hand suspension plates, right and left core boxes for same, 1 suspension plate for screw rod, core boxes for same, 1 water wheel case complete and core boxes, 1 brass water wheel with core boxes, 1 wood water wheel step and core boxes, 1 wood jack roller and core boxes, 1 wood jack roller frame and core boxes		300 00
đo	1-31	Henry Vanderburgh, Allanburgh— 24 railway fares and return to Port Dalhousie, &c do do St. Catharines	16 80 45	17 25
do do	31 } 26 31	To Walter Chatfield, St. Catharines 8 railway fares to Port Dalhousie, at 15 cts 1 do fare to Port Colborne	1 50	5 20
June July Sept.	28 28 37 8 386.	John Shickluna, St. Catharines— Team and carriage do do do do	4 00 4 00 5 00	0.10
April July do		do do Horse and buggy	5 00	19 50
đo	21	men repairing swing bridge and tightening up rods, &c., 14 days, at \$2.50	,	35 0 0
		passing vessels through old aqueduct at Welland; months of May, June and July, at \$20	\$***- f	60 00

Accounts chargeable to Welland Canal, Renewals and Repairs.

Date.	Nature of Work.	Amount.	Total.
1886.		\$ cts.	\$ cts.
July 12	Battle & Smyth, Thorold—20 gals. paint, at \$1.90		38 00
do 1-31	James Wilson (blacksmithing), Merritton— 406 ft. shafting repaired, at 1½ cts	6 09	
	410 screw bolts do at 2½ cts	10 25	
	240 rag bolts at 3 cts	7 20 32 80	
	678 lbs. screw bolts, at 5 cts	33 90	
	22 hrs. smith and helper, at 40 cts	8 80	
	James Wilson (foundry work), Merritton—		99 04
do 1-31	869 ft. castings, at $3\frac{1}{2}$ cts., \$30.42; 10 ft. gearing, at 7	1	
	cts., 70 cts	31 12	
	Cutting screws and adjusting 110 lbs., at 2½ cts	2 75	
•	15 cts., \$1.80	19 80	
	26 hrs. machinists boring and drilling, at 40 cts	10 40	04 87
	McCleary & McLean, Thorold-		64 07
do 1-31	4,141 feet pine, at \$16, \$66.25; 1,600 feet oak, at \$27,	1	
	\$43.20	109 45	
	11,586 feet oak gate timber, at \$60	695 16 197 50	
	2,570 do at \$28, \$71.96; 1,437 feet pine, at \$7.50,	1	
	\$25.15	97 11 33 62	
	875 feet pine, at \$35, \$3.62; 15 c. posts, at 20 cts., \$3	3 37	
			1,136 21
July 1-31	To Coy Bros., St. Catharines—		
	250 lbs. spikes, at 5c., \$12.50; 3 scythes and snaths, at \$1.75, \$5.25	17 75	
	4 doz. screws, 46c.; 10 wet stones, at 10c., \$1; 52 lbs.,		
	nails, at 4c., \$2.08	3 54	
	75c	10 27	
	2 pr. butts, 50c.; 1 paint brush, \$1.50; 3 galls. lard oil,	4.05	
	at 75c., \$2.25	4 25	
	75c. \$3.75	6 15	
	2 kegs blasting powder, \$8; 400 ft. fuse, \$8	16 00	
	1 pr. platform scales (1,000 lbs.)	30 00	87 96
July 1-31	To James Wilson, Thorold-		
	6 galls. coal oil, at 30c., \$1.80; 2 boxes glass, \$6.50	8 30 3 57	
	1 scythe and snath, \$1.90; 3 pr. strap hinges	0 0.	
	\$3.35	5 92	
	2 paint brushes, \$2.45; 2 door locks, \$1.75	4 20	
	\$20.16	21 96	
	28 feet 8-in. leather belting	17 64	
	54 do 5 do do at 40c	21 60 9 30	
			92 49
July 1-31	To Battle & Smith, Thorold—60 galls. paint, at \$1.90	•••••	114 00
ania F1-21	To James Rolston, Dunnville— 4-in. line, 50c.; 10 lbs. spikes, at 4c.; 2 sack brushes	1 07	
	2 paint brushes, \$1.50; } gall. black varnish	2 40	
	2 galls. machine oil, at 75c., \$1.50; 1 rake, 10c.; } gall.	2 00	
	oil, 40c		5 47
July 1-31	To John Albor, St. Catharines-		
	99 rolls wall paper, at 12½c	12 38 3 80	
	38 yds. border, at 4c., \$1.52; 99½ yds. border, at 5c.,		
		6 51	

Accounts chargeable to Welland Canal, R newals and R pairs-Concluded.

Date.	Nature of Work.	Amount.	Total.
 -		\$ cts.	\$ cts
[uly][1-31	To John Albor, St. Catharines— 13 yds. border, at 2c., 26c.; 11 yds. border, at 7c., 77c 20 yds. border, at 3c., 60c.; 50 lbs. paint, at 16c., \$8 1 gall. turpentine, 80c; hanging 107 rolls paper, at	1 03 8 60	•
	12½c., \$13.38	4 18 19 00 4 50	70 00
July 1-31	To James Wilson, blacksmithing, Merritton— 117 lbs. rag bolts, repaired, at lc., \$1.17; 54 lbs. straps,		
	repairs, at 1½c., 81c	1 98	
	straps, at 4c., \$45.39	47 13	-
	212 lbs., rag bolts, at 3c., \$6.36; 4 auger shanks 50c 51 lbs. steeling picks	152 40 8 36 3 06 11 60	
July 1-31	To McCleary & McLean, Thorold—		224 53
•	33,653 feet pine, at \$16.00	538 44 136 2 9 76 07	
	4,774 do 18.00	85 93 93 52 10 29	
	936 do plank, at \$13.50 9,638 feet oak, at \$25.00	14 63 240 95	
	8,362 do 27.00	225 77 144 06 45 44	
	5,000 do plank, at \$20	100 00 6 75	
	\$8.28	28 28 150 00	
	at \$2.30, \$12.16	46 96	
	1 window frame and sash, \$3.50; 930 oak piling, at 15c., \$139.50.	3 37 143 00	
J uly 1–31	To James Wilson, foundry work, Merritton-		2,087 75
	3,284 lbs. castings, at 3c	98 52 66 92 25 51 270 00	
	212 hours, machinist, horing, drilling and fitting, &c., at 40c	84 80	
J ul y 1–31	To Richard House, St. Catharines— Repairing oil cans, \$1.55; 1 pump and pipe, \$8	0.77	545 75
	7 squares roofing, \$5.50, \$38.50; cleaning out furnace, \$1 29 feet roofing cap., at 6c., \$1.74; smokestack, \$3 14 sheets tin, at 10c., \$1.40; 9 pieces 2 in. conductor,	9 55 39 50 4 74	ı
	at 8c., 72c	2 12 1 80	
	at 20c., 60c	2 65	
	10c	1 25 15 00 0 75	

Accounts chargeable to Welland Canal, Renewals and Repairs.—Continued.

Date.	Nature of Work.	Amount.	Total.
:	To Richard House, St. Catharines— 47 hours, 1 man, at 25c., \$11.75; 26 hours, helper, \$3.25. 3½ lbs. wire nails, at 8c	28 00 1 00	\$ cts.
	circle for new swing bridge, Lock 15, at \$10	466 66 204 25 670 91	
	By 83 yards stone supplied from Government quarry, \$2	166 00	504 91
			6,412 31

PAY-List in duplicate of persons employed on the Welland Canal during the month of August, 1886, to pay Carpenters', Laborers, Team, and account, chargeable to Renewals and Repairs.

Capacity.		When Employ		Names.	Т	ime.	R	ate.	A	mount.
Repairing harbor piers		Angust		H. Vanderburgh	1 70	nonth		75 0 0		\$ cts.
Preparing for and building for		Augus.		ir vangerburgh	1 "	1011011.		13 00		10 00
around Collector's office, l		do		G. C. Holmes	201	dona		2 25		ee nir
Dalhousie		do		W. M. Jones	28	do		2 00		66 37 56 00
do do		do	•••	Jas. Henason	28	do		2 00		56 00·
Taking to pieces and rebuild scow "McKenzie," for Di	inn-									
ville Division works, &c	•••••	do		Wm. Patterson		do		2 00		59 00
do do do	•••	do do		C. Demare		do		2 00		52 00
do do	•••	do		Alf. Coons Wm. Tinline		do		2 00 2 00		57 00 36 50
do do	•••	do .	•••	G. Anderson	21	do		2 00		42 00
đo do		do		Jno. Shultus, team {	16	do		3 50	}	92 00
Watchman, Port Dalhousie		do		Oscar Sharpe		do		3 00 1 25	j	38 75
do Lock 13	•••••	do	•••	John McMillan	31	d o		1 20		37 20
do do Painting fence around Collec		do	•••	Henry Hughes	31	do		1 20		37 20
office		do		Wm. Mossip	261	do	1	2 00		52 50
do do	***.	do	•••	R. Marshall		do		2 00		48 00
Caulking scow "McKenzie" general work, &c		do		John Doig	274	do	1	1 62}		45 10
do do	•••	do.	•••	R. Johnston	26	do		1 62		42 25
do do		do		John House				1 75	1	16 63
do do do	•••	do		T. Bradley F. Galbraith		do		1 50 1 50		4 50 4 50
Grading down bank, puttin					1		1			100
surface ditches and drains, elling off around Collect					1		1			
office		do		Con. Reed, fore- {	12	do	1	1 75	,	
		1		man (1134	do	1	2 00	1	48 00
do do do .	•••	1 1		John Murrell W. Bowman		do		1 50 1 50		36 00
do do:	•••	4.0		Andrew Secord				1 50		35 25 32 25
Cementing cellar floor, s	tore-	• 		\	1	,	1			
keeper's house and storeh	ouse,	do		Jos. Johnson, team.	12	do		3 00 3 50	1	81 50
do do	•••••		•••	July	. 27	do			,	CO 05
u b uo	•••	· uo	•••	Jno. Hawley { July	. 26	do		1 25	ĺ	66 25
Taking care of and passing v	esse.	1			1		1			
line, &c. Helping to oper gates and bridge Welland.	lock	do		July	. 27	do	. }	1 45		70 05
-	••••••	1	•••	A. Boyer July	. 26	do				76 85
do do	•••	. do	•••	Patrick Powers	- 18	do	1	1 50	1	27 00
Cutting sweet clover and ga	ther	-		•	1				1 -	
ing up same, hauling to				Charles Johnson	11.0	đo.	1	1 75	١,	
house and threshing	•••••	. 40	•••	Charles Johnson, foreman.	14	do]	1 75 2 00	1	49 00
do do		. do		F. Donahue	12	do	-	1 25	1	35 25
40 40	•••	1			113	do		1 50		30 20
do do	••	. do	••	T. Donahue	13			1 25 1 5 0		35 25
Filling up holes and was				Wishest Vist	1	-	1		1	
along canal banks, &c do do		. do		Michael Nestor Wm. Pew				1 50 1 50		39 00 7 50
do do		1 4-		Harvey Pew				1 50		18 37
do do		. do		. Martin Nestor	. 5	do.	··[1 50	1	7 50
do do do:		do	••	. Ribt. Hoover, team. . G. Putland, H. & W				3 50 2 00		3 50 18 00
		uo						2000		10 00

PAY-LIST in duplicate of persons employed on the Welland Canal, &c.—Continued.

					1		
Сара	city.	When Employ		Names.	Time.	Rate.	Amount.
		1886				\$ cts.	S cts.
Grading up heel		1000	•			w cus.	ap cus.
	and Bridge 16. tches along stone					,	
road and main	canal, &c	August	·	R. A. Booth, fore-	12 days	1 75	1 40 00
		_		man	14 do	2 00	} 49 00
do	do	d o		John Madigan {	12 do 13½ do	1 25 1 50	35 25
do	do	do		Geo. Brown	12 do 131 do	1 25 1 50	35 25
do	do	d o		Reni Redfern	12 do	1 25	35 25
√do	а.	do		Jas. Hansel	13½ do 12 do	1 50 1 25	35 25
		_		l l	13½ do	1 50)
d o do	do	do do		Bart O'Leary Daniel Kelly	1½ do 8 do	1 50 3 50	2 25 28 00
Making coal box.		do	•••	Jacob Wilkerson	1 do	2 00	2 00
Cleaning out ditc		_,	•••				2
side south Well		đo		Jas. Clancey	12 do	1 75)
do	do	do	•••	do	14 do	2 00	49 00
do	do	do	•••	H. Bailey		1 25	36 00
do do	do do	do do	•••	do M. Blake		1 50 1 25	{
do	do	do	•••	do	114 3 - 1	1 50	} 36 00
do	do	do		G. Nolan		1 25	3
do	do	do	•••	do		1 50	36 00
do	do	do	•••	T. Waldron	12 do	1 25	36 00
do Panaining old ami	do	do	•••	do	14 do	1 50	, 00 00
Repairing old swi	ne ferry	đo		W. Cooke	13 1 do	1 75	1
do	do	do	•••	do		2 00	49 62
do	do	do	•••	J Cooke		1 50	39 00
Cleaning out b							
	covering same			r . W	101 3-	1.05	,
at Port Colborn do	do	do do	•••	J. Moyerdo		1 25 1 50	36 62
do	do	do	•••	M. Anthes		1 25	13
do	do	do	•••	do		1 50	35 07
ďο	do	do	•••	E. Sloat	9½ do	1 25	32 87
đo do	do do	do	•••	_ do		1 50	32 01
do	do	do do	•••	J. Ryando	9 4 3 .	1 25 1 50	34 75
Cleaning out ba			•••	1 40	14 do	1 50	,
side of canal, &		do	•••	W. Deeks	12 do	1 25	1 22.00
do	do	do	•••	do		1 50	36 00
do do	do do	do	•••	C. Keen		1 25	35 37
do	do	do do	•••	Sam Cook, team	14 do 113 do	1 50 3 00	1
do	do	do	•••	do		3 50	79 00
Repairing lock g	gates Locks 8, 9,				122 40	0.00	,
10 and 11, also	bridge Lock 7				j		}
and of Paul	St; fitting up mal office barn,]
	hinery patterns:						İ
building fence	across Hydrau-				1		(
	St., &c	do	•••	N. Morey	27 do	2 75	74 25
do	do do	do	•••	P. Shortell	263 do	2 00	53 50
do do	do	do	•••	T. Rapsey	274 do	2 00	54 50
do	· do	do	•••	S. Radcliffe R. Nelson	13% do	2 00 1 25	54 00
do	đo	do	•••	j •		1 50	38 19
фo	₫ο	do		Chas. Hill, team		3 50	1 05 00
do	do	do	•••] do	12 do	3 00	} 85 00
•				162			-

PAY-LIST in duplicate of persons employed on the Welland Canal, &c .- Continued.

Capacity.	Whe Emplo			Nam	es.	1	l'ime	.	Rate		A	moun	ıt.
Tr 1	1886		-			- -		_	\$	cts.			cts
Watchman gate yard Painting Lock 4 bridge and n	Augus	t	J. P.	Boyle.	•• ••••	31	day	B	1	00	l	31	00
pairing floats	do		Thos.	O'Nei	1	12	do		1	75)		
do do	do	•••		do	• • • • • • • • • • • • • • • • • • • •					00	}	49	00
do do	do		Wm.	Assell	l	15]	do		1	25	-	19	37
Cleaning out ditches and filling			Ì			1		1					
up washouts, and facing ban			ļ			ı		- 1					
with clay and stone, little de	do do		Rich	Grant		121	đ.	- 1	3	50	1	20	25
cut, &cdo do	do	•••	T. M	Nama	ra	112	do	:::		25	1		-
do do	do	•••	i	do		131				50	 }	35	25
do do	do		Robe	rt Pew	• • • • • • • • • • • • • • • • • • • •	12	do			25	1	0.0	
do do	do	•••		do		114	do			50	1	36	75
do do	do		Wm.	Clarke	e	12	do			25	ĺ	25	25
do do	do	•••		do		13	do			50	15	33	40
do do	do				•••••			•••		25	1	35	25
do do Erecting new swing bridge co	do	100	l '	do .	••••••	134	ao	•••	1	50)	-	
plete at Lock 15 bridge; buil			l			ł		ı			l		
ing boat for repair gang, Di	v-		1			1		- 1			l		
ision No. 4, &c	do		F. T.	Walte	n	26	do		2	75	1	71	50
do do	do				y		do			00	l		00
do do	do		E. S	mith		26	do			00			00
do d o	do		D. S.	Walte	ell	12	do		2	0 0			00
do do	do	•••	Wm.	Trapn	ell	26	do			00	l		00
go go	do	•••	W. D	un n	•••••	14	do			00	ł		00
do do	do	•••	F.St	uman.		26	do		. 1	50	İ	39	00
Quarrying out stone; loading a unloading scow with team	14		1			- 1		- 1			1		
building stone culvert acre	88		j			- 1		ı			l		
ditch, and raising and maki	ıg		•			- 1		ļ			1		
up road at Lock 15 brid	ge		1			- 1					l		
approaches	do	•••	Jas.	Hamilt	on	26	do			00	1		00
do do	do	•••	Jas.	Reynai	rd	26		•••		50	1		00
do do	do	•••	A. B	radley.	•••••	22				50	1		00
do do	do	•••	Pat.	O'Neil		26				50			00
d o do do do	do	•••	Jus.	raywe:	l1 	201				50	l		25
do do do do	do	•••	Jno	Dunda	s	20				50 50	1		90
do do	do	•••	Ab.	Bradles	7	25	l do			50			25
do do	do		Wm.	Tearn	ey, W. B	26				75	1		5€
do do	do	•••	Jno.	Coyle,	team	25	do			50	1		25
Dunnville—Repairing top cove	r-		ł	• /			•						
ing of toll bridge; re-buildi	ıg'		l			ı					1		
workshop and putting up ad			١.				_				1		
tion to same—completed		•••	Jas.	Edgar	•••••	23	ďo	• • • •		50			. 50
do do do do	do	•••	Amo	mbana mbana	n	21	αo			50			20 88
do do	do	•••	W H	ntchine	h son,H.&	W 23	a do	•••		25 50			50
Painting top timbers toll bridg	e.	•••	1"."	иссии	оп, II. u	" 25	u	•	1 1	-	1	0.1	
also bridges ; cleaning off apr	on		1			1		- 1			1		
helow dam: filling up rut no	.es		l_	_		1.	_		1		1		
on tow and heel paths, banks	do	•••	Jame	es Gam	ble	23		• • • •		25	1		75
do do	¦ do				ssey					25	1		. 88
do do	do do	•••	M A	Smit		25		•••		25	1		88
do do		•••	Mrs. A	J. Wh	h, team ipple	8		••••		00	1		00
Washing, repair scow bedding, &		•••		· · · · · · · · · · · · · · · · · · ·	.Phro	···· 4	u	•••	l '	00	I		00

Accounts chargeable to Welland Canal, Renewals and Repairs.

Date.	Nature of Work.	Amount.	Total.
1886.		\$ cts.	\$ cts.
A ug. 1–31	To Coy Bros., St. Catharines-		
a.u.g. 1-01	9 kegs spikes, at \$5, \$45; 1 doz. galvanized pails, \$12	57 00	
	25 lbs do at 4c., \$1; 1 door spring, 25c.; 1 padlock, 20c	1 45	
	100 coach screws, \$7.50; 1 gross screws, 55c	8 05	
	5 galls, lard oil, at \$1, \$5; 1 gall, castor oil, \$1.25	6 25	
	1 scoop shovel, \$1.25; 6 bales oakum, at \$5, \$30	31 25	
	300 deck plugs, 90c.; 6 M.S. files, at 25c., \$1 50 6 prs. T. hinges, \$1.40; 1 pr. B. D. hinges, 70c	2 40 2 10	
	36 car bolts, \$1.09; 1 grindstone, \$1.42	2 51	
	l keg cut nails, \$3.50; 12 lights glass, 75c	4 25	
	2 staples, 36c.; 1 gate hinge, 50c.; 1 latch, 40c	1 26	
	200 lbs. white lead, at 7½c., \$15; 2 galls turpentine, \$1 50	16 50	
	2 P. H. augers, \$8; 2 rim locks, 90c	8 90	
	55 lbs. R. steel, at 12c., \$6.60; 26 lbs. band iron, at 4c.,	. 1	
	\$1.04	7 64	
	1 paint brush, 45c.; 50 thimbles, at 25c., \$12.50	12 95	156 57
July 17	A. Muir & Bros., Port Dalhonsie-	err cedere	100 01
111	20 lbs. spikes, at 5c., \$1'; 1'16 ft. oar, \$1.60	2 60	
	12 sheets sand noner	0 87 0 20	
	12 Buccus sand paper.	0 20	3 67
Aug. 1-31	John Mathews, Port Colborne—		
	1 128 IDS. Kun. manina rope, at 12*C	16 00	
	Paid freight on castings, &c	0 30	
	paper, 10cpaint brush, 30c., y 402. sheets sand	0 80	
	2 locks, 40c.; 3 prs. bolts and screws, 10c	0 55	
	2 hooks and eyes	0 08	17 70
do 17	B. Greening & Co., Hamilton, 2,000 feet & in, galvanized		17 73
wo	B. Greening & Co., Hamilton, 2,000 feet § in. galvanized wire rope, at 20c		400 00
do 1-31	I Chatfield & Neelon, St. Catharines—		
	2 globe holders, 20c.; 5 bell cranks, 75c	0 95 1 60	
	2 lbs. spring wire, 60c.; 1 pr. cutting plyers, \$1	0 90	
	1 lb. copper wire, 15c.; 31 lbs. sheet brass, 38c.; 3 caps,		
	7 ft 1 in pine 25p . 5 alberra 25p . 1 forms 40p	0 71	
	7 ft. ½ in. pipe, 35c.; 5 elbows, 25c.; 1 fount, 40c	1 00 0 98	
	1) lbs. plumbago, 60c.; 3 lb. asbestos packing, 38c 10 pump leathers, \$1, 5 ft. pipe, 25c.; 5 elbows, 25c	1 50	1
	pr. nose plyers, \$1; 2 doz. clips, 90c	1 90	
	1 washer, 10c.; 6 hose clips, 35c	0 45	0700
do 31	Gordon Mackay, Toronto-550 lbs. white Cape waste, 92c		52 25
•:	To P. McMurray, Welland-		
Nov. 3-19		2 25	
Dec. 10 1886.	2 new glass in lamps, 50c	1 00	
Aug. 1-31	4 do do	2 00	
	Repainting 3 lamps, \$1.35; 2 new lanterns at 75c., \$1.50	2 85	
	1 stove and pipe, \$4.75; repairing lantern, &c., 50c	5 25	
	Lines	0 50	13 85
_	Saul Burrows, Port Colborne—	i	10 00
June 19	Repairing lamp, 40c.; 10 feet gutter, \$1.50; 16 pieces	, , ,	
July 6	nasming, 20	2 10	
	\$1.00	60	
	27 feet 3 inch. conducting pipe, \$2.70; repairing trough,		
Anc or	50c	3 20	
Aug. 25	T ANN BLOLD MAIN halo and rest leaves (5 65	12,55

Accounts chargeable to Old Welland Canal, Renewals and Repairs.

Ď	ate.	Nature of Work.	Amount.	Total.
Aug.	886. 31	John Battle, Thorold, 20 barrels cement	\$ cts.	\$ ets.
do	1-31	Robert Foster, St. Catharines— Horse and buggy, 4 days, superintendent on repairs, at \$1.50 Horse and buggy, 1 day, superintendent on repairs	6 00 2 50	
		Horse and waggon, with men, repairing and tightening rods of swing bridges, 7 days, \$2.50	17 50	26 00
do	1-31	James Wilson, Merritton (Iron Work and Blacksmithing)— 976 lbs. s.bolts, at 5c.,\$48.80; 363 lbs. bands, at 4c.,\$14.52 12 lbs. steeling, at 6c., 72c.; 601 lbs. s. bolts, repairing,	63 32	
		at 3c., \$18.03	18 75	
		work, at 1½c, \$10.32	30 32 3 20 19 60	
do	1-31	Foundry Work. 1,224 inches castings, at 3½c., \$42.84; 683 inches water wheel gearing, at c	90 65	
1.		fitting, at 40c., \$34.40	36 65	262 49
July Aug.	23 31	Chas. Loesch, Welland, 28 meals for machinist repairing bridge at Welland, away from home, at 25c	40 4	7 00
Aug.	1–31	H. Vanderburgh, Allanburgh— 23 fares for Port Dalhousie and return, at 70c 2 do St. Catharines do 45c	. 16 10 90	17 00
July	8	R. D. Dunn, sundry account, St. Catharines— Paid freight 3 barrels cement from Toronto	1 50	••
Aug.	14	do cotton for cleaning officedo freight 4 coils wire cable, Hamilton	0 46 2 74	4 70
do	31	To R. H. Smith & Co., St. Catharines— Hanging, setting and filing 4 cross-cut saws, at \$1 50 Hanging, setting and filing 1 saw	6 00 0 75	
do	1-31	John Albon, St. Catharines— 42 rolls wall paper, at 12½c	5 25	6 75
		Hanging 30 rolls paper. 21 yds. border, at 8c., \$1.68, 71 yds. border, at 4c., \$2.84. Staining and polishing counters, collector's office, Port	3 75 4 52	
do	1-31	Dalhousie	28 60 73 61	16 52
		3,809 do 16 00	60 94 5 25 3 50	
		1,200 do 30.00	36 00 1 70 3 27	
		3 sashes at 35c	1 05	213 92
· do	1-31	Coy Bros., St. Catharines— 3 gross screws, \$1.10; 4 doz. car bolts, \$1.15	2 25 5 06 2 75 5 75 7 40 3 90 8 00	
	- 1	165	<u> </u>	35 11

Accounts chargeable to Welland Canal-Renewals and Repairs-Continued.

Date.	Nature of Work.	Amount.	Total.
1886.	M. I. William Miles II	\$ cts.	\$ cts.
Aug. 1-31	To James Wilson, Thorold— 307 lbs. manilla rope, at 15c	46 05	
	\$1, \$4 Lace leather, \$1.05; 1 broom, 25c.; 1 bridge broom, 25c 25 lbs. wrought nails, at 10c, \$2.50; 1 bale oakum, \$5;	5 50 2 0 5	•
	1 lock, 75c 14 pair strap hinges, at 20c., \$2.80; 29 lbs washers, at	8 25	
	5c., \$1.45	4 25 11 76	
	\$1.35	9 60 2 00	89 46
do 1-31	Battle & Smith, Thorold—15 galls. paint		28 50
do 1–31	1 gall. black Japan, \$1.50; \(\frac{1}{2}\) gall. turpentine, 50c 2 paint brushes, \$2.15; 16\(\frac{1}{2}\) lbs. line, \$2.06		
	3 gate hooks, 15c.; 2 lanterns, \$1.50	1 00	11 64
April 21 Aug. 30	C. A. Mitchell, St. Catharines—7 bbls. water lime, at \$1.65 R. G. Murdy, Dunnville—20 yds. gravel, at 60c		11 55 12 00
Apl. 28-30 May 12-18 June 1-30	9 meals 28 do 53 do For men away from home clearing out the culverts, &c., above feeder, at 25c	••••••	22 50.,
Aug. 1-31	McCleary & McLean, Thorold— 839 ft. pine, at \$17.00 per M	4 34 4 00 24 28 32 94	367 95 .
do 1-31	(Iron work and blacksmithing.) 1,754 lbs. iron work repairing, at 1½c., \$26.31; 479 lbs. iron work repairing, at 2½c., \$11.88	38 19 29 89	
•	1 new axle, \$2	83 05 10 00	
do 1-31	1,715 lbs. castings, at 1½c., \$25.75; 73,200 lbs. castings, at 2½c., \$183	208 73	
	3½c., \$16.59	98 74 1	
	244 hours machinery work, drilling, turning, &c., at 40c	97 60	509 54
	Total		2,339 18

Number of Pay-list, 148. Pay-list in duplicate of persons employed on the Welland Canal, during the month of September. 1886, to pay Carpenters, Laborers, Teams. &c., chargeable to Renewals and Repairs.

Capacity.	Wh Emple		Names.	Time.	Rate.	Amount.
÷					\$ cts.	\$ cts.
Re-building scow "McKenzie"	Sept.,	1886	H. Vanderburgh	I month	75 00 2 25	75 00 50 62
for Dunnville feeder works.	do	•••	G. C. Holmes W. M. Jones	25 do	2 00	51 0 0
Building coal shed and w.c.	do	•••	Jas. Hindson	148 do	2 00	29 00
rear of collector's new office. Repairing harbor piers and	do do	•••	W. Patterson C. Demare	24¾ do	2 00 2 00	49 50 52 00
bridges at various parts of	do	•••	Alf. Coons	23 do	2 00	46 00
canal, making tank for over-	do	•••	W. Tinlim	7½ do	2 00	15 00
seer's house and working at	do	•••		101 do	2 00	21 00
watchman, yard and shop, Port		•••	Jno. Shultes	26½ do	3 50	92 75
Dalhousie	do	•••	Oscar Sharp	30 do	1 25	37 50
W'hman, yard and shop, Lock 13		•••	Hy. Hughes	30 do	1 20	36 00
do do	do		Jno. McMillan Wm. Mossip		1 20 2 00	36 0 0
Pointing building and most	do	•••	R. Marshall	19 do	2 00	36 50 38 00
Painting bridges and waste weirs, &c., caulking repair	do	•••	Jno. House	94 do	1 75	17 06
scow and new pontoon.	do		Jno. Powman		2 00	16 00
• • • • • • • • • • • • • • • • • • • •	do do		J. Abbey		2 00	6 00 4 00
		•••	Cucos Deminin	2 40	2 00	7 00
Helping carpenters, &c	do	•••	John Doig		1 623	43 06
dodo	do		Robt. Johnston R. Ellgraft		1 62½ 1 50	48 75
	"	•••	it. migiait	5 do	1 30	7 50
	do	•••	Chas. Johnson		2 00	40 00
Threshing outsweet clover seed	do	•••	Thos. Donahue		1 50	37 50
holes along canal banks and	do		F. Donahue Wm. Jones		1 50 1 50	36 00 24 00
re-building drains and clear-	do		Michael Nestor		1 50	6 00
ing mud out of Higgins' cul-	do		Wm. Clarke	2 do	1 50	3 00
vert, &c.	do do		Geo. Putland, h. & w R. G. Hoover, team	2½ do 4 do	2 00 3 50	4 50
	40	•••	in d. moorer, team	* 40	3 30	14 0 0
Filling up behind stone facing /	do		R. A. Booth		2 00	5? 00
of banks, opening up and cleaning out bad ditches.	do		Jno. Madigan		1 50	38 25
Putting snubbing post and	no do		Geo. Brown Ben. Redfern	25½ do 22 do	1 50	38 25 33 00
stone foundation under stone	do		Jas. Hansel	24½ do	1 50	36 75
house, Division No. 3.	do		Daniel Kelley, team	9 do	3 50	31 50
Opening up and cleaning out back ditches, &c	do	1	Jas. Clancy	26 do	2 00	52 00
do d o	do		Hugh Bailey		1 50	39 0 0
do do	do	•••	Michael Blake	24 do	1 50	36 00
do do do do	do do	- 1	Thos. Waldron		1 50 1 50	21 00
do do	do		Geo. Nolan Wm. Pew	1 do	1 50	39 00 1 50
	_	- 1		_		2 00
. 1	do do		Wm. Cook	00 3-	2 00	52 0 0 -
Opening up and cleaning out	do		Wm. Deeks		1 50 1 50	39 00 39 00
ditches; facing banks of har-	do		J. Moyer	26 do	1 50	39 00
por east side with stone;	do	•••	C. Keen	26 do	1 50	39 0 0
building fence in front of lock- master's house, &c.	do do	***	E. Sloat	00 3.	1 50 1	39 00
manufact is mouse, wo.	do		J. Ryan	26 do	1 50 1 1 50	39 00 39 00
	ďο		Sam. Cook, team	9 do	3 50	31 50
Taking care of and passing ves-	do	•••	John Hauley	26 do	1 25	32 50
sels, &c Helping to swing old bridge—	do	1.	A. Boyer	4	1 45	37 70
	do		P. Powers	26 do	1 50	39 00

Number of Pay List, 148.—Pay-list in duplicate of persons employed, &3.—Continued.

Building new lock gate; picking up high left gate and placing same in pond; put 2 dock gates in lock 7; moving lock below lock 2; repairing lock, 3 gates, &c. Painting loek, 4 bridge, and floats and approaches, cleaning out Beaver dam, creek, &c. Building boats and punts for same for repairs gang; carrying sone, timber and tools; building bridge over ditch; re-arranging and laying sidewalk along bridge; building derrick and general repairs. Quarrying out stone; loading and unloading stone and clay for general repairs. September N. Morey	\$ ct 71 5 52 0 52 0 52 0 39 0 91 0 80 0
September N. Morey 26 days 2 75	52 0 52 0 52 0 39 0 91 0 30 0
Description Description	52 0 52 0 52 0 39 0 91 0 30 0
dock dates in lock 7; moving lock house from lock 6 to 5; hauling out timber and piling same for bridges below lock 2; repairing lock, 3 gates, &c.	52 0 52 0 39 0 91 0 80 0
S. Radcliffe	52 0 39 0 91 0 30 0 52 0
A	39 0 91 0 90 0 52 0 18 7
Chas. Hill, team	91 0 30 0 52 0 18 7
do	80 0 52 0 18 7
Painting lock, 4 bridge, and floats and approaches, clean ing out Beaver dam, creek, &c. do	18
Painting lock, 4 bridge, and floats and approaches, clean ing out Beaver dam, creek, &c. do	
Comparison of the comparison	
Repairing planks on long bridge over Grand River and Repairing planks on long bridge over Grand River and Repairing planks on long bridge over Grand River and station- A. W. Bradley	
do	39 € 39 €
do	39 (
do	38 1
Building boats and punts for same for repairs gang; carrying stone, timber and tools; building bridge over ditch; re-arranging and laying side walk along bridge; building derrick and general repairs.	1 !
S. M. Beadley	
building bridge over ditch; re-arranging and laying side- walk along bridge; building derrick and general repairs. W. Trappell	71 (
Tre-arranging and laying side-walk along bridge; building derrick and general repairs.	52 (
Walk along bridge; building do do do do do do do do James Hamilton	50 (
do	52 (39 (
do James Hamilton	4
do Jas. Reynard	52
Caparrying out stone; loading and unloading stone and clay for general repairs.	39
Carrying out stone; loading and unloading stone and clay for general repairs.	36
do do do do do do do do do do do do do	39
for general repairs. do do Abe Bradley	39
do Abe Bradley	89 30
do do do Wm. Teamer	39
do do Wm. Teamer	ũ
Repairing planks on long bridge do Jas. Edgar	19
over Grand River and station- do Jas. Edgar	91
	۰.
ary bridges, repairing apron 1 do in Sneenan	37
below dam and floodgate; do A. Mann	36 4
building and putting in sluice do R. Mitchell 3 do 1 50	4
way through feeder banks at do Ira Bessey	16
Hutcheson Road. do Wm. Hutchinson, h. &	
wg	36
do John Thrush	31
do Jas. Pamble	28
Repairing tow paths, banks, &c. \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	23
do M. A Smith, team 73 do 3 00	3
Painting office do T. C. Tipton	22

Accounts chargeable to Welland Canal, Renewals and Repairs.

· D	ate.	Nature of Works.	Amount.	Total.	
-	200		9		
_	386. 1-30	To Coy Bros., St. Catharines-	* \$ cts.	\$ cts.	
	}	450 lbs. spikes, at 5c., \$22.50; 5 galls. turpentine, at 75c., \$5.75	26 25		
	Ì	45½ galls. lardine oil, at 65c	29 58		
		at \$2, \$28	31 75 1 75		
	i	4 paint brushes, \$3 60; 4 bales oakum, at \$5, \$20	23 60		
		50 galls. boiled oil, at 75c., \$37.50; I keg nails, \$3.50 400 lbs. Venetian red, at 6c., \$24; 5 galls. lard oil, at	41 00		
	1	\$1, \$5	29 00 31 8 5		
	1	6 prs. bolts, 75.; 2 gross screws, 55c.	1 30	222.22	
do	1-30	Henry Mussen, Allanburgh-		216 08	
		31 galls. lard oil, at \$1, \$3.50; 1 lamp, 75c	4 25		
	1	Repairing clock, \$1; 10 lbs. red lead, \$1	2 00 2 90		
	j	12 lbs. oatmeal, 50c.; 8 galls. coal oil, at 30c., \$2.40 3 boxes axle grease, 45c.; 2 brooms, 60c	1 05		
		4 lamp chimneys	0 40	10.60	
do	1-30	James Thompson, Thorold, 1 water can, \$1; repairing		10 60	
đo	1-30	oiler and lamp, 50c		1 50	
· ·	1-00	d gall, raw oil, 39c.; putty, 5c.; d gall, varnish, 65c	1 08		
		2 locks, 70c; 10 bush. lime, at 25c., \$2.50; 2 locks, \$2 100 lbs. spikes, \$5; 10 lights glass, 76c.; 2 prs. hinges, 25c 1 pail, 25c.; 5 lbs. Venetian red, 25c.; 6 prs. hinges, at 10c., 60c.; 3 sticks chalk, 8c	5 20 6 01		
	l	10c. 60c.: 3 sticks chalk. 8c	1 18		
	į	1 gross screws, 42c.; 4 lbs. finish nails, 32c	0 74	• • • • •	
₫o	1-30	Samuel Burrows, Port Colborne—		14 21	
w	1-50	1 cup, 20c.; 1 lamp for waste weir, \$4	4 20		
	Ī	1 stove for scow, \$5; 3 ft pipe, 45c.; 1 damper, 25c	5 70		
	Ì	16 lbs. zinc, at 10c Time fusing on line, &c	1 60 0 50		
_		-		12 00	
do	10	John Battle, Thorold—6 brls. cement, at \$1.50		9 00	
May June	7	Nelson Haight, St. Catharines—1,000 hard brick		8 00	
~		Store House		8 75	
Sept.	17-18	W. A. Bonaberg, Port Colborne—2 days repairing lock tender's house, at \$2.75.		5 50	
do	1-15	Robert Foster, St. Catharines—			
	ſ	Horse and buggy 3 days, for superintendent, at \$1.50 Horse and buggy 6 days, for machinist repairing bridges,	4 50		
	1	&c., at 2.50	15 00		
do	1-30	Hanny Vandarhusch Allanhwach		19 50	
uo	1-00	Henry Vanderburgh, Allanburgh— 23 railway fares, Port Dalhousie and returning, at 70c	16 10		
		2 do St. Catharines do 45c	0 90	18 00	
đ٥	1_30	W. Chatfield, St. Catharines-		17 00	
		2 railway fares, Port Colborne and returning, at \$1 50			
		1 do Welland do Paid freight and cartage on tools	1 00 0 75		
		Street car fares for month	0 45		
đo	1–30	Chas. A. White, Stone Bridge—8 meals and lodging for		5 20	
		men from St. Catharines, machinists, repairing Bridge No. 21, at 25c		2 00	
đo	1-30	James Wilson, Merritton— Foundry Work—		- 40	
		1,185 lbs. castings, at 3½c., \$41.48; 12 set-screws, at 15c., \$1.80	43 28		
	-1	169			

Accounts chargeable to Welland Canal, Renewals and Repairs.

I	Date.	Nature of Work.	Amount.	Total.
	886.	The Tames Wilson Manifeston	\$ cts.	\$ cts
ep.	. 150,,,	To James Wilson, Merriton— Foundry Work—		
		489 lbs. waste weir gearing, at 7c., \$34.23; 10 in.	26 92	1
		chisels, \$2	36 23	
		work, at 40c., \$53.20 Blacksmithing, &c.—	59 20	
		79 lbs. rag bolts rep., 79c.; 178 lbs. straps rep., at		
		14c., \$2.67	3 46	
		bolts, at 3c., \$1.23	4 88	
		52 lbs. straps, at 4c., \$2.08; 7 lbs. bar steel, at 6c., 42c. 352 lbs. screw bolts and shackles	2 50 17 60	
				167 15
дo	15	R. D. Dunn, St. Catharines, Sundry Account— Paid express charges on 3 cases from Ottawa	11 70	
do do	20 23	do 1 do	5 20	
uo	43,	do 3 do Above was stationery from the Department at Ottawa.	3 15	
		To Roger Miller, Port Dalhousie-		20 05
do	30	Taking down floors, partitions, stairs and doors of over-		
		seer's house, Port Dalhousie, removing mud and decayed flooring, laying in 160 feet drain from same		
		to harbor, concreting floor, building cellar, renewing		
		floors, partitions, stairs, doors, &c., throughout, re- arranging windows and door openings, putting in new		
		sash and doors, taking down old stone chimney and		
		building new brick one, repairing outside blinds,	£00.00	;
		plastering, painting, &c., papering, as per agreement Taking out decayed floor of adjoining lockmaster's	500 00	
		house and mud under concreting and relaying new		
		floor, laying 160 feet drain from same to harbor, taking off old and putting on new plastering and ceiling,		
		making new window openings and putting in new		
		sash frames and blinds, taking out other decayed sashes and fitting with new, painting and papering		
		where required as per agreement	135 00	
		Taking out floor, partition, stairs, doors of old collector's office and converting into additional dwelling accom-		
		modation for overseer, removing vault and brick divi-		
		sion wall and rebuilding in proper position, making new window opening and fitting with new sash and		
		blinds, renewing other old sashes, fitting storm sash, repairing blinds, removing old chimney, building new		
		one and plastering, painting and papering throughout		
		as per agreement	400 00 45 00	
		Painting outside lockmaster's house and II pairs blinds	45 00 45 00	
		Painting outside collector's office and 8 pairs blinds 160 feet eave-trough and continuation pipe, at 15c	30 00	
		342 feet gas pipe for railing around old pontoon, at 9c	20 00 30 78	
		24 elbows and tees for same	3 60	180 00
		Old Welland and Feeder Canal.		178 38
	j	Coy Brothers, St. Catharines-		
do	1-30	3 pairs hinges, \$1.15; 2 gross screws, 85c	2 00	
		450 lbs. spikes, at 5c., \$22.50; 2 paint brushes, \$3 8 gals. black oil, at 40c., \$3.20; 6 gals. lard oil, at \$1,	25 50	
	- 1	3 0	9 20	
		1 doz. hooks, 25c.; 1 pair pincers, 50c.; 1 hand saw \$2 1 hammer, 75c.; 1 gimlet, 10c.; 3 gals. black oil,	2 75	
	1	\$1.20	2 05	
	i	1 box matches, 20c.; 2 gals. machine oil, at 75c., \$1.50	1 70	
		170		43 20 :

ACCOUNTS chargeable to Welland Canal, Renewals and Repairs-Continued.

Date.	Nature of Work.	Amou	nt.	Total.
		\$	cts.	\$ 1_ cts
Sept. 1-30	James Wilson, Thorold— 40 feet rope, at 12½c., \$5; 38 feet heavy line, at 15c.,		1	
.	\$5.70	10	70	
1	\$9	14	1 75	
ł	locks, \$1		3 55	
1	50 lbs. heavy line, at 15c		7 50	
	69 lbs. putty, at 5c., \$3.45; 3 packages screws, \$1.25; 350 spikes, at 6c., \$21		5 70	
	56 lbs Venetian red, at 8c., \$4.48; 9 gals. coal oil, at		1	
	25c., \$2.25	•	6 73	
1	18c	ŀ	5 81	
	\$1.25	:	2 05	
	1 lantern globe, 35c.; pair locks, 50c.; 3 packages screws, \$1.25		2 10	
	2 circular saws, \$12; 35 feet leather belting, at 40c., \$14	_	6 00	•
Ì	15 feet leather belting, at 35c., \$5.25; 400 lbs. spikes, at		. 1	
I	5 c., \$20		5 00 4 50	
	Battle & Smith, Thorold—			145 60
do 1-30	40 gals. mixed paint, at \$1.90			76 00
Sept. 1-30	James Thompson, Thorold— 3 galv. pumps for Government scow, at \$3		00	
ļ	2 ventilators, \$1.75, \$3.20; 1 stove for scow, \$8		1 00	
	8½ lengths pipe, 15c., \$1.27; 14 bush. lime, 10c, \$1.40; 1 damper, 25c		2 92	
1	30 lbs. galv. smoke stack		7 00	
	1 pail, 40c.; 1 elbow, 20c		60	35 02
Sept. 1-30	Condon & Hall, Dunnville— 75 lbs. white lead, 7c.; 2 crow bars, \$3.30; 1 file, 15c		70	
ĺ	43g galls. linseed oil, \$29.89; 122 in. felt paper, at 4c.,		3 70	
	\$4.84	3	4 73	
Ì	saw, \$1		75	
Sept. 1-30	James Ralston, Dunnville-		40	48 58
l	3 spades, \$3; 1 whet stone, 5c.; 1 bucket, 50c	:	3 55	
1	grease, 13c	;	13	
	oil, 80c		1 55	
1	4 galls. boiled oil, 80c., \$3.20; 11 hinges, 55c.; 12 bolts, 36c		11	
1	Hooks and staples, 43c.; 31 lbs. putty, 5c., \$1.55; }		2 92	
	l gallon paint, 75c.; 1 brush, 8c.; 6 files, 60c		L 43	
Bept. 1-30	Thomas Grenville, Thorold-		91	18 60°
}	1 bridge sign		1 00	
Sent 1.20	2 small signs, 87½c		75	1 <i>0</i> 0E
Sept. 1-30	8,812 feet pine, \$13.50, \$118.96; 15,749 feet pine, at\$16,			16 25
1	\$251.98 800 feet pine, at \$16.50, \$13.20; 5,252 feet pine, at \$17,	37	94	
1	\$89.28	10	2 48	
1	2,949 feet pine, at \$18, \$53.08; 538 feet oak, at \$20, \$10.76	a	3 84	

Accounts chargeable to Welland Canal, Renewals and Repairs-Continued.

Date.	Nature of Work.	Amount.	Total.
Sent 1-30	To McCleary & McLean, Thorold—	\$ cts.	\$ cta.
2001, 1 2011.	1,775 feet pine, at \$25, \$44.37; 500 feet oak, at \$22, \$11.00	55 37	•
	117 feet pine, at \$30, \$3.51; 2,640 feet oak, at \$27, \$71.28	74 79	
Sept. 1-30	\$4.37 4 sashes, 35c., \$1.40; 33 bunches shingles, 80c., \$26.40 James Wilson, Merritton—	17 18 27 80	712 4 9
	Blacksmithing— 45 lbs. steeling, 6c., \$2.70; 32 lbs. cast steel, at 20c., \$6.40	9 10	
	\$46 10	49 35	
	54c	30 22	
	repaired, at 1½c., 86c	12 14	
	623 lbs. castings, at 3½c	21 80 46 00	
Sept. 1-30	Thomas Hastings, St. Catharines— 112 days, mason, at \$3, \$35.25; 82 days labor, at \$1.50,		168 61
	\$12.75	7 75	
	1 ceiling stone, 12 inches, at 15c. per inch	14 00 1 25	,
	95 lbs. plaster	0 95	79 15
	Total		3,073 33

PAY-LIST in duplicate of Persons employed on the Welland Canal, during the month of October, 1886, to pay for repairing piers at Port Colborne, chargeable to Special Account.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	
Repairing and reinstating, partially, injury done to the water pier Port Uolborne Harbor until more extensive restorations can be made next spring	October do do do do do do do do do do	Jas. Ryan. H. Brenan. Thos. Pringle C. McCain Wm. M. Cracken	3 do 2 do 2 do 14 do 2 do 2 do 2 do	1 50	\$ cts. 12 00 9 00 9 60 3 38 4 76 3 00 4 13 3 00 2 63 3 00 1 13	
				·	<u> </u>	

Pax-List in duplicate of Persons employed on the Welland Canal during the month of October, 1886, to pay carpenters, laborers, teams, &c., chargeable to renewals, and repairs.

		ı		1	ì	
Capacity.	When Employed	d	Names.	Time.	Rate.	Amount.
	1886.	- -			\$ cts	\$ cts.
Repairing bridges, harbors, piers, Lock 3 binder, floats and scow		1				
"Gordon," &c	October .	I	H. Vanderburgh	1 month.	75 00	75 00
do do		\G	3. C. Holmes	3 1 days	2 25	7 87
do do		···)	Wm. Patterson	25½ do	2 00	51 00
do do	do .		D. Demare	25 do	2 00	50 00
do do do do	do .		Wm. Mossip Richard Marshall	25 do 24 do	1 75	51 00 42 88
do do do	do .		ohn House	1 do	1 75	1 75
do do	do .	[]	John Shultes, team	25 do	3 50	87 50
do do	do.	٠ ١	W. M. Jones	2 do	2 00	4 00
Watchman, shop and yard, Port	١.	- 1.	^ ~			
Dalhousie			Oscar Sharp		1 25	38, 75
do Lock 13	do .	4	Henry Hughes John McMillan	31 do	1 20 1 20	37 20 37 20
Painting floating pile-drivers,	l uo,	•••	A OHH WOUTHING	31 40	1 20	01:40
pontoon and fence around Toll	1	1		1		
Collector's new office, &c	do	[.	John Doig	23 do		37 35
do do	do .	[]	Robt. Johnson	21 do		34, 13
đo đo			W. Bowman			39.00
do do		··· ·	John Howe	7 do	1 50;	10 50
Building fence that was taken down to allow Contractors to		-		1		
proceed with their work &c	do .]	Con. Read, Foreman.	26 do	2 00	52 00
do do	do .].	Jno. Murrel	23 do		34 50
do do	do .		W. Bowman	26 do		39 00
do do			And, Secord			33 00
do do			Jos. Johnson, team	18½ do	3 50	64 75
Putting stone in wash-out, Lock		- 1		}	}	
25; waste weir and threshing out sweet clover seed for sowing		- }		}		
banks, &c			Chas. Johnson, For	14 do	2 00	28 00
do do	do		F. Donahue	. 10 do		15 00
do do			T. Donahue			12 75
do do			Wm. Jones			10 50
do do	do.	•••	J. H. Booth	. 9 do		14 25 15 75
do do		***	Robt. Hoover, team.	4½ do	3 30	15 15
Taking down old stone-house Port Robinson: loading and	}}	l		1	1.]
hauling stone for building piers		- }			1.	
for new one: repairing bridge	el le				1	i
across roadway, Port Robinson	11					
Lock, &c		•••	R. A. Booth	. 25 do		51 00 37 50
do do do do	1 3.		Jno. Madigan Geo. Brown			37 50
4. 4.			Jas. Hansell		1	37 50
do do	1 3.		Benj. Redfern		1	36 75
do do	do		Danl. Kelly, team		. 3 50	26 25
Opening up and cleaning ou			- 01	00 3-	0.00	
ditches, &c		•••		26 do		
do do do do	1		Hugh Bailey Michael Blake			38 25 38 25
do do do do	1 4 4	•••	Geo. Walan	241 do		
do do	. do	•••	Wm. Pews	25 do		38 25
Levelling in front and around	d		·	1 -	1	1
Lock Tender's house, prepar	- }		1	İ	1	1
ing for building new fence			1	}	1	1
Taking to pieces and reinstat	[]:		ļ ¹	1	1	}
ing swing bridge damaged b str. "Calvin." Excavating fo	7		1	1	1	1
and building culvert under tow	r-			1	ł	l
path, east side canal, con. 3	3. }`					1
Humberstone, &c	do	•••		20 <u>₹</u> do.] 2 00	41 50
•			1,3			

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c.—Continued.

Capacity.	When Employ		Names.	1	lime.	Rate.		Amount.		
		1886.					\$	cts.	\$	cts.
Levelling in front a		.]				.	Ψ	CUB.	Φ	cus.
Lock Tender's house		1	r	Chas. McCain Jno. Cook		days		00 75		50
do do	do	do	•••	J. Ryan		do		50		50 63
do	do	do	•••	Wm. Deeks	263	no	1	50		13
do	do	1	•••	J. Meyer		do		50 50		13
do do	do		•••	C. Keen E. Sloat		do		50		13
do	do	do	•••	M. Authes	25	do		50		63
do	do	1 .		H. Brenan		do		50		63
do do	do	1 3-		R. Armstrong Saml. Cook, team		do		00 50		00 25
Helping Ferryman		do	•••	Wm. Bradley	5	do		50		50
Taking care of passi						İ				
lines, &c. helping bridge, Welland	saving old	do		Jno. Hanley	26	do		98	20	F0.
do	do	do	•••			do		25 45		50 70
do	do	do		Pat. Pcwers	26	do		50		00
Repairing old lock gat ing bridge across t Sheckluna's, mak doors for Lock 4 building gates for v	ail race at ing storm dwelling,									
&c., &c		do		Nathan Morey	26	days	2	75	71	51
[°] do	do		•••	P. Shortell	26	do		00		00
do	do	do	•••	T. Rapsey	26	do		00		00
do do	do	1 3.	•••	S. Radcliffe Chas. Hill, team		do		00 50		00 25
do	do	do	•••	J. W. Boyle	31	do		00		00
Painting Lock tender's			•••	Thos. O'Neil	26	do		00		00
do do	do	do do	•••	Wm. Assell Richard Grant	15	do		25		38
do	do	do	••••	Robt. Wilson	27	do		50 50		25 50
Driving piles at the					1		•	00	30	30
Lock 24, Port Robins		do	•••	Wm. Tinlin	18	do		25		50
do do	do	do do	•••	Alf. Tinlin	131	do		50 50		25
do	do	do	•••	T. John ston, horse	13	do		50		25
Quarrying out stones				-	-	_	_			
repairs, &c., &c	do	do	•••	Jas. Hamilton Jas. Reynard	26	do		60		00
d o	do		•••	Arthur Bradley	224	do		50 50		75
do	do			Patrick O'Neil	214	do		50		25
do	do	3 -		Jas. faywell J. Laughey	203	do		50		13
do do	do	4.0	•••	John Dundas	221	do		50 50		25 75
do	do	1 3.	•••	A. Bradlev	23₹	do		50		25
d o	do		•••	Wm. Tearney	134	do		75		13
do Building new derrick	do		•••	John Coyle, team	23	do	3	50	80	50
scow for general re-	nairs. Divi-					ļ				
sion No. 3 and 4	• • • • • • • • • • • • • • • • • • • •	do	•••	F. T. Walton	26	do	2	75	71	50
do do	do	do	•••	S. R. Bradley		do		00	52	00
d o	do	do do	•••	Ed. Smith Wm. Trapwell		do		00		00
do	do	1 -		Wm. Dunn		do		00		00
do	do	1 = -	•••	D. S. Walton	13	do	2	00	2 6	00
do do	do	1 .		D. Plumsted F. Shuman		do		00		00
do	do		•••	Alex. Walker	5	do		50 00		00
do	do	. d o	•••	Bart. O'Leary	2	do		00		00
Dunnville teams with	a		•••	R. F. Lattimore	34	do		00	10	50
d o	do	· do	•••	Thos. McDonald	. 4	do!	3	00 I	12	00

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c .- Continued.

Capacity.	When Emplo y ed	Names.	Time.	Rate.	Amount.
Putting sluice way through tow- path, banks of feeder, at Hutch-	1886.			\$ cts.	\$ cts.
inson's road, repairing flood- gates at Dunnville, &c., &c do do do do do do Repairing tow-paths and banks of feeder, &c do do do do do	Ostober do	Jas. Edgar R. Mitchell Amos Main A. Shuhan W. Hutchinson, h & w John Thrush Thos. Bessey Ed. Webber Ira Bessey Jas. Davis. H. Fite Jas. Gamble Jas. Clarke M. A. Smith, team R. G. Murdy do R. Montague do	8 do 11 do 9 do 23 do 23 do 23 do 20 do 19 do 11 do 11 do 11 do 12 do	1 50 1 50 1 25 1 25 1 25 1 25 1 25 1 25	35 25 12 00 12 00 16 50 13 50 34 50 28 75 28 75 10 00 25 00 23 75 21 25 5 31 33 00 36 00 22 50

ACCOUNTS chargeable to Welland Canal—Repairs.

Date.	 -	Amount.	Total.
1886.		\$ cts.	\$ cts
Oct. 1-30	. To Cox Brothers, St. Catharines— 590 lbs. barbed wire, at 7½c., \$44.25; 22 lbs. staples, at 7½c., \$1.65	45 90 1 72 45 00 92 30 7 25 4 25 9 40 10 82	
Sept. 1-30.	1 gall. oil, \$1 50; 6 lights glass, \$1.20; 30 lbs. putty, \$1.20	3 90	220 54
	2 padlocks, 60c.; 1 hasp and staples, 10c	0 70 36 95	20.00
Oct. 31.	John Cloy, Thorold— 2 skeins marline 92 lbs. canvas, at 10c	0 50 9 20	39 92° 9 70°
do 1-31.	2,116 lbs. spikes, at 4½c., \$95.22; 21 lbs. spikes, at 5½c, \$1.16	96 38	5 1 0
	\$39.25 15 lights glass, \$1.23; 49 car bolts, at 10c., \$4.90 1,238 car bolts, at 5c., \$61.90; 2 paint brushes, at 45c.,	42 75 6 13	
	90c	31 00	
	nails, \$4	11 00 13 18	
do 1-31.	Henry Mussen, Allanburgh—	6 40	315 89
	1 paint brush, \$1; ½ gall. paints, 80c.; repairs to lamp, 13c	ા ૧૧૧ ં	
do 1 –31.	8 lengths pipe, at 14c	1 12	6 55
do 1-31.	paint brush, \$1		2 60
	at 5c To John Mathews, Port Colborne—		9 20
Oct. 1-30.	281 lbs. spikes, at 5c., \$14.05; 100 lbs. nails, \$3.50 1 axe and helves, \$1.35; 1 axe and helves, \$1.31 Glass and putty, 88c.; 6 lanterns, at 75c., \$4.50 2 ship augers, at 95c., \$1.90; screws, 63c	17 55 2 66 5 38 2 53 1 20	90.29
do 31.	P. McMurray, Welland— 3 glass in lamps, at 50c., \$1.50; 1 burner and collar, 85c. 2 reflectors, \$1.30; 5 hours time repairing lamp, \$1 Repairing office lamp.	2 35 2 30 0 50	29 32
	176		5 15

Accounts chargeable to Welland Canal-R pairs-Continued.

Date.		Nature of Work.	Amount.	Total.
18	388.		\$ cts.	\$ cts
Oct.	31	To Samuel Burrows, Port Colborne— 2 10-in.reflectors, \$2.75; repairing oil can and lamp, \$1.10 1 5-gal. oil can and feeder, \$1.35; 1 paint can, 50c Repairing semaphore lamp, 1 red light, &c	3 85 1 85 4 00	9 70
do	11	Cunningham & Yale, St. Catharines-1 steel plate		2 25
	1–30 1–31	George Loyd, St. Catharines— 2 pieces galvanized iron, \$1.20; repairing lamps, 65c 2 tin lamps, \$1.70; 5 caps, \$1, 3 plugs, 45c 79 ft. iron pipe, at 8c., \$6.32; 150 ft iron pipe, at 6c., \$9.00; 3\[2\] ft. pipe, at 35c., \$1.23	1 85 3 15 16 58	
∆ ug.	1-30	120 ft. gas pipe, at 10c., \$12; 16 ft. iron pipe, at 8c., \$1.28 3 ft. iron pipe, at 35c., \$1.05; 1 socket, 30c.; 1 elbow, 35c. 2 lock nuts, 55c.; 7 gas burners, \$1 50; solder, 40c 3 2-light pendants, at \$7, \$21; 1 2-light pendant, \$4 1 hall light, \$12; 2 Argand burners and chimney, at	8 00 13 28 1 70 2 45 25 00	
		\$1.80 8 shade holders, \$1.80; 6 glass shades, at 90c., \$5.40 2 decorated shades	13 80 7 20 3 00 6 25	100.00
do	13	E. Riddle & Son, St. Catharines—40 ft. 24-in. till, at \$1.75.		102 23 70 00
do	19	Campbell Sewer Pipe Co., Hamilton-96 pieces 18-in.		
do	13	John Date, Montreal-1 rubber cloth diving dress		48 00 50 50
Dct.	1-31	To Neff & Son, Humberstone— 76 lbs. iron, at 2½c., \$1.90; 15½ lbs. nuts, at 6c., 93c 12½ hrs. machinist's work, at 40c	i i	-
đo	7–20	To F. Woods, Pt. Colborne— 1 72 lbs. screw bolts, at 6c., \$4 32; repairs for bolt and wedge, \$1.05 3 lbs. bolts, at 10c,, 30c.; 6 lbs. washers, at 4c., 24c	5 37 0 54	10 08
		55 do rings and rods, at 5c	2 75	28 66
do	1–31	To James Wilson, Merritton— (Blacksmith work.) 903 lbs. rods repaired, at 1½c., \$13.54; 851 lbs. bolts repaired, at 2½c., \$20.28	34 82	
	1,794 lbs. bands, at 4c., \$71.76; 434 lbs. steel, at 20c.,	90 73		
	\$8.70. 32 lbs. Loumon iron, at 7c., \$2.24; 90 lbs. rag bolts rep.,	80 46		
		90c	3 14 1 86	
		(Foundry work.) 3,060 lbs. castings, at 3½c	107 10	
		163 hrs. machine work and machinist drilling, fitting, &c., at 40c	65 20 1	•
		Colborne	14 95	407 26

ACCOUNTS chargeable to Weiland Canal-Repairs-Continued.

			Amount.	Total.
			\$ cts.	\$ ct
Oct.	1–31	To McCleary & McLean, Thorold— 4,780 ft. oak, at \$25, \$119 50; 5,791 do., at \$28, \$145.35 5,656 do \$27, \$152 71; 297 ft. pine, at \$17, \$5.05 5,316 ft. pine, at \$18, \$95.68; 9,514 ft. do., at \$16, \$152.22. 500 do \$13.50, \$6.75; 1,000 ft. do., at \$17 50,	264 85 157 76 247 90	
		\$17.50 153 cedar posts, at 20c	24 25 30 60 168 15 16 50 5 00 24 80	
∙ d o	9	To Geo. W. Chase, Pt. Colborne— Elm timber, \$3.50; pine boards, \$2		939 81 5 50
do	1–30	To Charles Loesch, Welland— 35 meals, at 25c., \$8.75; hay and oats for team, \$1.70 (Above for men and team away from home.)		10 45
do	1-31	To Thos. J. O'Niel, Port Colborne— 127 meals, at 25c. (Above for men from yard, and Pt. Dalhousie and Thorold to Pt. Colborne, repairing piers and bridge damaged.)		31 75
do	1–31	To H. Vanderburg, Allanburgh—25 railway fares to Port Dal- housie and return		17 50
do	1-31	Robert Foster, St. Catharines— Horse and buggy, 2 days, at \$2, \$4; 1 horse and buggy, ½ day, \$1.50. Horse and waggon for machinist repairing bridges, 13 days, at \$2.50.	5 50 32 50	
do	1	Tug "James Norris," Port Dalhousie, towing Government		38 00
do	1-31	scow "Gordon"	12 23 5 00	4 00
do	1-31	D. Hughes, Port Colborne— Express charges and freight on castings, tool box, &c., from St. Catharines and Merritton	8 48	17 23
do	1-31	Cox Brothers, St. Catharines— 2 kegs blasting powder, \$8; 300 feet fuse, \$6 3 gallons coal oil, 90c.; 1 rim lock, 50c	14 00 1 40 1 95 59 2 90 1 65	15 89
do	1-31	Battle & Smith, Thorold— 12 glass window panes, at \$1.50	18 00 38 00	22 49
do	1–31,	James Rolston, Dunnville— 1 hasp, 13c.; 2 doz. glass, 12x24, \$2.80	2 93 1 40 2 00 1 90 50 4 25 15 00	56 00 27 98

Accounts chargeable to Welland Canal-Repairs-Continued.

. D a	ate.	Nature of Works.	Amount.	Total.
18	86.		\$ cts.	\$ cts.
Oct.	- 1	To Joseph Strickluna, Ship-builder, St. Catharines— 9 picks repaired, at 10c., 90c.; 28 lbs. bolts repaired, at 3c., 84c	1 74	Ψ 0.0.0.
		25 spike bolts, at 6c., \$1.50; 12 spike bolts repaired, \$1.05	2 55 3 75 1 13 42 50	51 6 7
Oct.	1-31	James Wilson, Merritton— 22 lbs. steel work, at 20c 870 lbs. bolts, at 5c., \$43.50; 1,754 lbs. plates, &c., at	4 40	31 01
		617 lbs. bolts repaired, at 24c., \$15.42: 635 lbs. strans	113 66	
		repaired, at 1½c., \$9.53	24 95 0 53	
•	•	40c	30 80	174 34
Oct.	31	H. P. & Wm. McCraney, St. Catharines— Amount of claim for damage to our lot, being part of Lot No. 16, in 6th Concession, Township Grantham, caused by washout of hydraulic mill race, loss of fruit trees, &c., &c. This claim being in full of all de- mands, past and future, for all damages arising or accruing from the above named acciden s, which occurred in November, 1884		200.00
Oct.		McClearey & McLean, Thorold-		300 00
		2,953 ft. oak, at \$27, \$70.72; 2,844 ft., at \$28.00, \$79.63 162 do 29, 4.70; 1,348 do 25.00, 33 70 4,238 ft. pine, at 16, 67.81; 2,400 do 16.50, 39.60 259 do 35, 9.06; 375 do 17 50, 6.56 256 do 18, 4.61; 678 do 17.00, 11.53 76 ft. cove, at 14, 76c.; 6 bundles shingles, at 80c.,	159 35 38 40 107 41 15 61 16 14	
		\$4.80 Band sawing cleats	5 56 0 75	
		rollers, \$2	5 72 27 00	375 94
Oct.	1-31	R. G. Murdy, Dunnville— 50 yards gravel, at 60c	30 00 9 00	
Oct.	1–31	Thomas Hastings, St. Catharines— 700 brick, at 90c., \$6.30; 6½ brls. mortar, \$6.50 2 tickets (railway) Port Colborne and return	12 80 2 40 21 00 7 50	39 00
Oct.	31	∮		43 70 15 00
Oct.	1-31	James Upper, Allanburgh-25 meals for men on repair scows, at 25c		6 25
Oct.	1-31	William Martin, Stromness—17 meals for men away from home on repairs, at 25c		4 25
		Total		3,564 29

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of November, 1886, to pay for repairing Port Colborne Pier damaged by storm, chargeable to Special Account.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Repairing and reinstating partial injury done to the West Pier, Port Colborne Harbor, until more extensive restorations can be made next spring, &c.	do do do do do do do do do do do do do do do do do do	Wm. Cook R. Chalmer. C. McChain Hy. Brenen Thos. Pringle. N. McCracken J. Harbison. Con. Ryan J. Kingston M. Makegan Jas. Britton. F. Boyer Wm. Dean D. Wilcox R. McNeal F. Mahaffey Thos. J. O'Neil Wm. Ramsey. J. Richards	161 do 154 do 26 do 91 do 142 do 19 do 10 do 11 do 11 do 12 do 12 do	1 50 1 50 1 25 1 25 1 25 1 25 1 25 1 25 1 25 1 25	\$ cts. 51 50 24 38 22 88 32 50 11 56 18 44 12 50 11 88 15 00 1 88 12 50 17 50 15 00 21 88 10 00 6 25 5 94 17 81 2 19

Accounts chargeable to Welland Canal, Repairs, Port Colborne Pier.

Date.		Nature of Work.	Amount.	Total.
1	886.		\$ cts.	\$.cts.
Nov.	5-24 1-30	To John Mathews, Port Colborne— 1,467 lbs. 6-inch, 7-inch and 8-inch spikes, at 4½c 2 saw files	66 02 0 20 31 72	66 22
do do	3 30	John Bradley, Thorold—18024 yards stone, at 90c., for pier, Port Colborne. McCleary & McLean, Thorold—21,583 feet, 3 x 8, 3 x 10 and 3 x 12, pine, at 16c.	14 70	46 42°. 162 80 345 32
		Total	••••••	620 76

PAY-LIST in duplicate of persons employed on the West Pier at Port Maitland, in securing Timbers during the month of November, to place binders on sides of superstructure to secure old Timbers, chargeable to Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	
Carpenters putting binders on West Pier at Port Maitland do do do do Laborers levelling stone and piling old timbers and planks do	do do do do do do do do do do do	James Edgar	2½ do 7 do 4 do 3 do 4 do 3 do	\$ cts. 1 50 1 50 1 50 1 50 1 25 1 25 1 25 1 25 1 25 3 00 3 00	\$ cts. 9 75 4 50 3 75 10 50 8 75 5 00 3 75 5 00 9 00 6 00	

PAY LIST in duplicate of Persons employed on the Welland Canal during the month of November, 1886, to pay Carpenters, Laborers, Teams and accounts, chargeable to Renewals and Repairs.

Capacity.	When Employed		Names.	Time.	Rate.		Amount.	
Repairing piers, waste weir,					\$	cts.	\$	cts.
bridges and wheelbarrows, &c.	Nov.	1886	H. Vanderburgh	1 month	75	00	75	00
do do	do		Wm. Patterson	12 days		09		00
do do	do	•••	C. Demare	26 do		00		00
Painting pontoon house and help-	"	•••			_	"	•	
ing at general repairs, &c	do		John Doig	221 do	1	621	36	16
do do	do	•••	Robt. Johnston	25 do		62		63
do do	do		John Shultes, team			00	67	50
Watchman, shop and yard, Port		•••	1	2	_	``]	• •	
Dalhousie	· do		Oscar Sharpe	30 do	1	25	87	50
do do Lock 13		•••	John McMillan	30 do		20	36	00
do do	do		Henry Hughes		1	20	36	00
Cleaning out roadway and drains						- 1		
through tunnel after storms;	1			1		- (
facing banks with stone near	ł					- 1		
waste weir, Lock 25	do		Chas. Johnson	11 do		75		25
do do	do		Wm. Jones			25		63
do do	do		F. Donahue			25		50
do do	do		J. H. Booth			25		25
dodo	do	•••	Robt. Hoover	6 do	3	00	18	00
Drawing out broken piles and	1			1				
driving additional new ones						l l		
all along approaches, Port Rob-				1		1		
inson Bridge	do	•••	Wm. Tinlin	26 do		25		50
do do	do	•••	Alp. Tinlien	24 do		50		75
d o do	do	•••	John Sutton	241 do		50		75
do do	do	•••	Jos. Johnson, horse	24½ do	1	50	36	75
Taking off decayed walings and						1		
shore braces; cutting 6 feet off						- 1		
piles forming approaches to Port				1		- 1		
Robinson Bridge; cutting new	İ			1 .		- 1		
and stronger walings and caps;	1]		- 1		
re-arranging and replacing short			E 10 W7-14	ا ، ا		,, [F0.
end shore braces to lower level.	do			26 do		75		50
do do	do	•••	S. R. Bradley	122 do	1 2	00	44	50

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c .- Continued.

Capacity.			Whe Emplo		Names.	7	Time.		Rate	·	A i	mou	n t.
Taking off decayed w	ralinos a	n d							. \$	cts.		\$	ct
			Nov.,	1886	Ed. Smith	. 14}	davs		2	00		28	50
do	do		do		W. Trapwell	. 22	do			ŏŏ l			00
do	do		do	•••	D. S. Walton	22				00			00
do	do	•••	do	•••	D. Plumsted	2Z			2	00		44	00
₫ο	do	•••	do	•••	Benj. Baker	$ 18\frac{3}{4}$	do			00		37	50
do	do	•••	do	•••	R. Jackson	183	do	[00			50
do	do	•••	do	•••	Alex. Abbey	19	do			00			00
do do	do do	•••	do	•••						00			00
do	do .	•••	do d o		F. Shuman					50			88
Stonecutter, cutting		in		•••	Wm. Abbey	·· 02	uo		1	50		12	75
slope stone wall			do		D. McIver	61	do		3	00		10	50
Removing Government of contractor's way.	t House	out			R. A. Booth	-				75			5 50
Taking down stone Robinson Bridge, lowering shore brac	wall, P	ort mit							•				
up ditches, &c			do		John Madigan	201	dо			25	-	95	6
do	do	•••	do	•••	Geo. Brown	201	do			25			5 63
do	do	•••	do		Jas. Hansel	22	do			25			3 1
do	do	•••	do		Ben. Redfern				1	25			88
do	do .	•••			Dan. Kelly (team)			!	3	00		18	3 00
Uarpenter, building s Clearing out and	opening	up			Jas. Wilkerson	1 -		***		00			7 00
back ditches, &c	do		do	•••	Jas Clancy	26	do			75	l		5 50
do	do	•••			Hugh Bailey		do			25 25			2 50
do	do	•••			Mich. Blake			:::		25	Į į		4 3 6 2
do	ão		do		Wm. Peno		do			25	ľ		6 2
Building culvert und east side of canal, C	ler towp oncession	n 3,	_				_	"				•	
Humberstone	• • • • • • • • • • • • • • • • • • • •	••••	do	•••	Wm. Deeks	26	ďο			75	١.	4	5 5
do	do		do		J. Cook	1 111	do	•••		75	1	3'	7 3
do	do		do		I Woman	1142	do			25 25	})		
Opening up and c	learing	out		•••	J. Moyer	20	uo		1	20	l	3.	2 5
back ditches, &c					C. Keen	24	do		1	25	ĺ	3	0 0
do	do	•••	do		E. Sloat					25	Ì		25
фo	do		1		M Anthes					25			9 3
ďο	do	•••	do		F. Moyer		do			25			8 7
do	ďο	•••	do		J. Ryan				1	25	l		0 3
do	do	•••	do		Sam. Cook (team)				3	00	l	3	5 2
Taking care of and		res-	1 -					- 1	_		1		
sels' lines, &c	do	••••	do		John Hanley		ďο	1		25	l		6 2
do Helping at Welland I		•••			Adolph Boyer		do			45		-	7 7
Attending Port Col				•••	. Patk. Powers	26	do		1	. 50	l	3	9 0
(ferryman disabled			do	w	7 m Brodlow	20	4.	ı	140		1		۰.
(reilyman disapted)	<i>,</i>	•••••	l uo	**	m. Bradley	30	do	***	140	00		4	2 0
OLD WELLAND AND CANAL.	FEEDER	ı											•
Repairing pile driver piles for driving; d: 12-Mile Creek an sheeting piles; cutt	riving pi d Lock ting off p	les 2 iles			 	_							
along floating tow			1 7		. N. Morey					75	1		11 8
do do	do do	•••	1		. P. Shortell				1	2 00	ł		2 (
do	do	•••	4		T. Rapsey		do			2 00	1		2 (
Building gates for wa		•••			S. Radcliffe		do	•••		00 5	1		2 (
Watchman, gate yar	dand she	วก	do	••	J. W. Boyle	20	do	•••		3 00 1 00	1		71 2 30 (
,		r	,	••	182		40	•••		- 55	1		,,,

PAY LIST in duplicate of Persons employed on the Welland Canal-Continued.

Capacity.	Wh Emplo		Names.	Time.	Rate.	Amount.
	-	—				S cts
Painting bridge; putting dow						•
new snubbing posts at Locks				l	1	
5 and 17; cutting brush alon hydraulic race, &c	g No.	1000	Thor O'Neil	20 30-0	1 75	40.00
- a. 1.	i =:	1000		15 do		49 0 0 18 75
do do .	1 3	•••		241 do	1	30 63
do do .	do	•••				22 50
Quarrying out stone, loading an	do do	•••				
unloading stone scow			James Hamilton	241 do	1 75	42 87
do do .		•••	James Reynard	22 do		27 50
do do .		•••	Arthur Bradley	14 do	1 25	17 50
do do .	. د ا	•••	Patrick O'Neil	203 do		25 9 4
do do .			Jas. Faywell			26 5 6
do do .	i a	•••	J. Laughey	194 do		24 69
3	1 7		J. Dundas	14± do		17 81
do do .	1 1			4 do		27 19 5 00
Teams hauling stone from quarr		•••	Alex. Bladley	4 do	1 25	5 00
to scow	do		John Coyle	20 do	3 00	60 00
do do .	. do		Ham Page		3 00	15 00
do do .	. do		John Bradley			13 50
Putting new foot boards on Guar	1		,		1 - 1	
Lock gates, and repairing floo					1	
gates	.l do	•••	Jas. Edgar	8 do	1 50	12 00
do do .	. do		John Read			5 00
Repairing towpaths and banks					1	
unloading stone scow; remov	-1				i i	
ing sunken logs out of Por	9		ļ	}]]	
Maitland Lock; repairing boor timber, &c	do		John Thrush	20 do	1 50	20.00
do do			Thos. Bessey		1	30 00· 12 50·
do do			Jas. Davis		1 25	12 50
do do	1 1		Ed. Webber			12 50
do do			Hiram Fite			12 50
do do	1 1		Jas. Gamble		1	20 00
Teams hauling material for re						_, _,
pairing banks, also hauling	ς				1 1	
rubbish out of culverts, &c			R. G. Murdy		3 00	27 00
do do			Henry Aikins		3 00 (6 75
do do			A. Galbraith			15 00
do do	. do	•••	M. A. Smith	2 do	3 00	6 00
Painting wood work inside o				1	! 1	
Locktender's house, Por			TO COMPANY	0 3.	1 , 50	10.00
Maitland	l do	•••	T. C. Tipton	8 do	1 50	12 00
Cleaning out back ditch east an west side stone culvert	do	- 1	C. Wilson	12 do	1 50	18 00
do do	1 1	•••	S. Mains	9 do	1 25	11 25
do do	3 .	•••	Cal. Dutcher		انتمنا	11 25
do do	1 1		C. Billard, team		3 00	9 00
.	1	•••		1	,)	
	1				i l	2,950 41

ACCOUNTS chargeable to Welland Canal, Repairs.

Date.	Nature of Work.	Amount.	Total.
1886.		\$ cts.	\$ cts.
NOV. 1-30	To Coy Bros., St. Catharines— 100 lbs. spikes, \$5; 10 lbs. cut nails, 40 cts 10 lbs. plaster Paris, 50 cts.; 79 lbs. putty, at 3½ cts.,	5 40	
	\$2.76	3 26 5 00	•
do 1-30	James Wilson, Thorold-		13 66
	4 gals. boiled oil, at \$1, \$4; 2 mauls, 40 cts	3 40	
	30½ lbs. heaving line, at 15 cts	4 58	
	\$1.25, \$5	5 30	
	4½ cts., \$6.08	6 79	1
	*Supplies for Government scow and men.	20 73	
	1 doz. plates, \$1.30; 1 doz. cups and saucers, \$1.35	2 65	
	2 pitchers, \$1; 10 lbs. salt, 10 cts.; 1 lb. mustard, 40 cts. 8 bush. potatoes, at 60 cts., \$4 80; 191 lbs. meat, at 10	1 50	
	cts, \$19.10	23 90 2 23	
·	101 lbs. cheese, at 15 cts., \$1.58; 8 pr. blankets, at \$2.25. \$18	2 15 19 58	
	1 bush. onions, 90 cts; 7 yds. towelling, at 10 cts., 70c. 1 box matches, 15 cts.; 2 galls. vinegar, 80 cts	1 60 0 95	
	5 qts. beans, 28 cts.; 2 lamp burners, 30 cts	0 55 5 50	
•	3 chimneys, at 10 cts (*These supplies were for men boarding and sleeping on Government scow.)	0 30	106 11:
6do 1−30	R. A. Abbey, Port Robinson— 170 lbs. nails, at 3½ cts., \$5.95; 21 ft. shingles, at 4½ cts.,	1	
	95 cts	6 90	
	*1 box mustard, 15 cts.; 17 loaves bread, at 12 cts., \$2.04. *15½ lbs. butter, at 20 cts., \$3.10; 2 lbs. tea, at 60 cts.,	5 90 2 19	
	*Sugar, \$1; 53 lbs. salt, 53 cts.; 2 brooms, 50 cts	4 80 2 03	
	*1 lantern, 80 cts.; 11 lbs. meat, 88 cts.; 1 bush. pota- toes, 60 cts	2 28	
	(*These supplies were for men boarding and sleeping on Government scow.)		24 10
do 1-30	Wm. V. Garden, Welland— 1 wrench, 65 cts.; 10 wrought spikes, 50 cts	1 15	
do 6-11	Paid freight on diving apparatus from Port Dalhousie Railway fares for diver and assistant from Port Dal-	1 40	
	housie and return	3 00 1 00	6 55
do 1-30	John Mathews, Port Colborne— 23 lbs. manilla rope, \$2.88; 1 doz. iron buttons, 53 cts	3 41	9 33
	1 gross screws, 50 cts.; 3 in. strap hinges, 38 cts.; 4 files, 40 cts	1 28	
	2 bolts, 10 cts, ; 2½ lbs. putty, 13 cts.; 4½ prs. hinges, at 10 cts., 45 cts	0 68	
	ton coal, at \$6	0 64 1 50	7 51

Accounts chargeable to Welland Canal, &c .- Continued.

•				
D:	ate.	Nature of Work.	Amount.	Total.
1	886.	To William Thompson, Thoroid—Outfit for men boarding on	\$ cts.	\$ cts.
Nov.	1-30	Government scow— 15 lengths pipe, at 15c., \$2.25; 2 elbows, 70c.; 1 thimble, 25c. 1 cook stove, \$12.00; 2 iron pots, \$1.50; galvanized pail, 40c 6-quart pail, 20c.; 2 spiders, 80c.; tea-pot, 50c.; tea drawer, 15c 1 coffee pot, 50c.; 1 dipper, 20c.; 2 wash basins, 50c.; dust pans, 50c 2 iron pans, 40c.; 2 3-qt. pails, 40c.; 2 pot covers, 30c 1 dozen knives and forks, 95c.; 2 dozen spoons, 65c Steamer, 25c., tea kettle, 85c.; 14 lbs. line, \$1.12	3 20 13 90 1 65 1 70 1 10 1 60 2 22	
do	1 20	1 ventilator, \$1.75; repairs to pump, 75c	24 00	53 10
фO	1–30	Paid 2 railway fares to Welland, re diver	0 73	6 04
∙do	1–30	Henry Vanderburgh, Allanburgh— 23 railway fares to Port Dalhousie and return, at 70c 2 do St. Catharines, at 45c	16 10 0 90	17 00
Oct. Nov.	4 30	W. Chatfield, St. Catharines— 3 railway fares, Port Colborne and return, \$1.50 C. P. charges on tools Street car fares	4 50 0 30 0 60	
-do do	30	office, Port Dalhousie		5 40 3 50 38 00
do	1–30	Robert Foster, St. Catharines— Horse and buggy, for Superintendent, ½ day Horse and waggon, with men, repairing bridges, &c., 8 days, at \$2.50	1 50 20 00	
√do	1–30	22 do horse, at 75c	49 50 16 50	21 50 66 00
Nov.	1-30	(Above for men on pile driver at Port Robinson and away from home) To Charles Loesch, Welland—40 meals, for driver and assist-		
		ant, at 25c James Wilson, Merritton— Blacksmith work—	•••••••••••••••••••••••••••••••••••••••	10 00
-do	1–30	125 lbs. ironwork, repaired, at 2c 2,509 lbs. screw bolts, repaired, at 2½c	2 50 62 73 1 08 28 96 159 70 19 60 27 26	
		185		343 43

Accounts chargeable to Welland Canal, &c .- Continued.

Date.	Nature of Work.	Amount.	Total.
1886. Nov. 1-30	McCleary & McLean, Thorold— 4,160 feet oak, at \$27, \$112.32; 128 feet pine, at \$18, \$2.48 7,997 feet pine, at \$16, \$127.95; 312 do \$22, \$6.86 176 do \$30, \$5.28; 6 do \$35, 21c 44 do \$40, \$1.76; 13 cedar posts, 20c., \$2.60 1,025 feet piling, at 15c	\$ cts. 114 80 134 81 5 49 4 36 153 75 0 76 2 97 22 94	\$ cts.
do 1–30	Old Welland and Feeder Canal. Coy Bros., St. Catharines— 3 gallons boiled oil, at 80c., \$2.40; ½ gallon turpentine, 38c	2 78 1 10 12 40 10 08 2 56	440 10
do 1 5	\$3.75 James Quinn, owner of schooner "Highland Beauty," Oakville— Damages caused by rotten snubbing post breaking off while vessel entering lock, as follows:— 1 gib boom	28 00 7 00 18 00	33 39
do 1-4			50 00 28 50
do 16	gantes = === to passes === to	t	2 00
do 15-16		431 00	
do 1-3	James Wilson, Merritton— 22 lbs. brasses, at 30c., \$6.60; 55 lbs. castings, at 3½c., \$1.93	8 53 22 80	
do 1–20	Blacksmithing— 136 lbs. bars, repaired, at ½c., \$2.04; 232 lbs. bolts, repaired, at ½c., \$5.80 146 lbs. straps, at 4c, \$5.84; 521 lbs. screw bolts, at 5c., \$26.05 134 lbs. steeling at 6c., \$8 04; 63 lbs. new steel, at 20c.,	7 84 31 89	-
do 1-30	McCleary & McLean, Thoroid— 2,316 feet oak, at \$27, \$62.53; 3,628 feet oak, at \$25, \$90.65. 2,639 feet oak, at \$20, \$52.78; 1,955 feet pine, at \$16, \$31.28. 2,852 feet pine, at \$18, \$51.34; 120 feet hickory, at \$30, \$3.69.		391 27
			2,189 86

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of December, 1886, to pay Carpenters, Laborers, Teams, chargeable to Removals and Repairs.

14440				1			
Capacity			When Employed	Names.	Time.	Rate.	Amount.
			1886.			\$ cts.	\$ cts.
Taking off decayed	waling	and					
shore braces; cutti					} }	1	
forming approache inson Bridge; Put					1		
and stronger walin	gs and ca	.ps;				l	
re-arranging and	i replac	cing			1 1		
shortened shore br level; blocking up	bridges	ior	İ				
winter use, &c			December	H. Vanderburgh	1 month	75 6 0	75 00
do	do do	•••	do	. F. T. Walton	. 18 days	2 50	45 00 22 75
do do	do	•••		S R. Bradley		1 75 1 75	22 75
do	do	•••		W. Trapnell	13 do	1 75	22 75
do	do	•••	do	D. S. Walton	. 13 do	1 75	22 75
do do	do d o	•••		. Wm. Dunn Benj. Baker		1 75 1 75	22 75 7 90
do	do	•••		R. Jackson		i 75	6 13
do	do	•••	do	. Alex. Abbey	. 4 do	1 75	7 00
do	do	•••		D. Plumsted		1 75 1 50	22 75 6 06
do do	do do	•••	do	. Wm. Abbey F. Shannon	. 4 do 4 do	1 50	6 00
Stone cutter, cuttin		on	Į.	i	1		
stone wall			do	D. McIver	. 2 do	3 00	6 00
Teams hauling mater inson Bridge, &c	riai, Pt. i	KOD-	do	.D. Kelley	. 6 do	3 00	18 00
do	do	•••••		Jno. Coyle		3 00	12 00
Drawing out broke							
driving additional							
along approaches bridge, &c				. Wm. Finline	. 4 do	2 25	9 00
do	do	•••	do .	Alf. Finline		1 50	6 00
фo	ďο	•••		. Jno. Sutton		1 50	6 00
do Watcher's shop and	do rard Pt	n.;;		Jas. Johnson, horse.	4 do	1 50	6 00
housie			do .	Oscar Sharp	31 do	1 25	38 75
Watcher, Lock 13			do .	Jno. McMillan	. 16 do	1 20	19 20
				Henry Hughes	. 15 do	1 20	18 00
from above Wellar					1		
inson and storing			do .	Jas. Clancey	. 1 do	1 75	1 75
do	do	•••	do .	Hugh Bailey	. 1 do	1 25 1 25	1 25 1 25
do do	do do	•••		Mich. Blake Geo. Nolan		1 25	1 25
do	do	•••				1 25	1 25
do	do		do .	J. Dunlop	. 1½ do	1 25	1 88
do do	do do	•••		Jno. Cook Wm. Aikens		1 25 1 25	1 25 1 25
Building storehouse		on 3,		WILL AIRCHS	1 20	1	1
Pt. Robinson, &c.,	, &rc		do .	Jacob Wilkerson		1 75	31 50
do	do do	***		Jas. McCoppen R Stevenson		1 25 1 25	7 50
do do	do	•••	do .	R. Stevenson	22 do	1 25	2 50
do	d o	•••		John Howe	. 1 do		1 25
Division N	o. 4.						
Repairing Air Line removing same a	nd repla	dge cina					
again			do .	Wm. Cook	71 days		13 12
do do	do	•		R. Chalmers		1 50 1 25	1 50 6 25
40	do	••	. do	J. Cook 187	15 do	i 120	. 0 20

PAY-LIST in duplicate of remons employed on the Wellard Canal, &c.—Continued.

Capacity.			Whe Employ		Names.		Ti	me.	Rat	е.	Am	ount.
Division No. 4	-Con.								\$	cts.	<u>-</u>	\$ cts
Repairing Air Line Flo		ge,	_			1	٠,		_			
removing same, &c	do	•••••			J. Ryan			ys lo		25 25		6 25 6 25
do	do	•••	do do		H. Brennan Wm. Deek			lo		25		7 50
do	do	•••	do		J. Major			lo		25		6 25
do	ďο	•••	do		C. Keen			io		25 25		6 25 6 88
do do	do do	•••	do do		E. Sloat		5 d	10 10		25		6 25
do	đo	•••	do		F. Moyer			lo		25		5 00
do	do	•••	do		T. J. O'Neil			lo		25		1 25
do do	do	•••	do	•••	F. Mahager			io		25		1 25 25 50
Helping to attend ferr	do vv	••••	do do	•••	S. Cook, team Wm. Bradley		an d	lo		40		29 40
Building new gates	for w	aste	"	•••	Will. Bladicy]		l	
wiers; and placing	scows	in				- 1			1		l	
position and securing	ig them	for			l				1		l	
winter; sheeting pas basement of canal of	ffice	TIIB	do		N. Morey	وا	22 3 d	lo		50	ļ	56 87
do	do	•••	do	•••	IP. Shortell		144 (10	1	75		25 38
do	d o	•••	do	•••	T. Rapsev		13 (10		75	i	22 75
do d o	do do	•••	1	•••	S. Radcliffe Chas. Hill, team	••••	64 6	10 10		1 75 3 00		38 06 19 50
Watchman, Gate Yard		•••	do	•••	J. W. Boyle		31 6	do	1 .	00		31 00
Helping carpenters;		in			. ,,, 20,, 20,, 10,, 10,, 10,, 10,, 10,,				•			
from edge of banks					1				l			
throughout whole						-			l			
throughout whole loous times night and			do		Thos. O'Neil]	15 (do	1 :	75	1	70 0 5
do	do	•••	do	•••	1 3.		16	do		50	1	50 25
do	фo	•••	do		Wm. Assil		15} (25		19 38
do	do	•••	do		R. Grant			do	1 -	L 25 L 25	l	1 25 2 50
do do	do do	•••	do do		Wm Chandler J. W. Lynch			do do		25	[2 50
do	do	•••	1 4.		John Dacey			do		25		1 25
do	do	•••	1		A. W. Bradley		1 (do		L 25		1 25
do	do	•••	do		Micheal White			do	1 .	1 25	l	5 00 1 25
do do	do do	•••	٠		Robert Nelson Fred. Sherer		1 0	do do		1 25 1 25	i	1 88
Dunnville.		•••	""	•••	l red. Bherer		-2	uo				
			,			١		3 -	1	1 50	İ	13 50
Putting new planks on do	do	-			James Edgar Geo. Kerns			do		1 50 1 50		15 5
do	do	•••	1 3.		James Davis		31	do		1 25	1	4 3
do	do	•••		•••	. Thos. McDonald, te	am	3	do		2 50	1	7 5
n. do	do	•••	do	•••	T. C. Tipton	••••	26	do	•	1 50		39 0
Painting Lock Tend		and							1		1	
Port Maitland; cu clearing away ice fi									1			
gates; blocking	up sv	ving	1									
bridges for winter u	se: sto:	ring	:		r , m	ļ	21		1	1 50	1	31 5
away lumber and to			l do	•••	John Thrush John Taylor	••••		do do	- 1	1 25	1	2 5
do	do do	•••	1 4.		Hiram Fite			do		1 25		2 5
do	do	•••	1	•••	Thos. Bessy		6_	do		1 25	1	7 5
do	do	•••		•••	. C. Fritz	•••••	4		1	1 25	1	53
do	do	•••	1 3-		John Bessy		3½ 5	3 -		1 25 3 00	1	4 3 15 0
do do	do do	•••	1 4-		. R. G. Murchy, tean M. A. Smith do			do	L .	3 00	1	15 0
Clearing out Marshy		vert		•••	III. 12. DESITION TO		-	"	1		1	
and filling up rut ho					. John Henderson			dο		1 25		11 2
do	do	•••	do		. W. Campbell, tear			do		3 00	1	12.0 3.0
do	do	•••	do	••	. A. Hanna do	•••	1	do	٠١	3 00		3 (
			1		1						1 -	,069 3

ACCOUNTS Chargeable to Welland Canal, Repairs.

Da	ite.	Nature of Work.	Amount.	Total.
10	86.		\$ cts.	\$ ets.
_		To Coy Bros., St. Catharines—	0 70	φυσ
vec.	1-31	6 fire bricks, 30c.; 10 fire bricks, 40c	29 64	
		2 latches, 50c.; 3 pair hinges, 45c	0 95	
		75c., \$11.25	21 38	52 67
_		James Wilson, Thorold—		32 01
đo	1-31	2 packages cut nails, 70c.; 71 bolts, 35c.; 3 pair hinges, at 36c	4 61	
		70 lbs. nails, \$2.80; 3 locks, at 25c., 75c	3 55 7 83	
		3 yards wove wire, at 40c	1 20	
		Richard House, St. Catharines-		17 19
do	31	10 lamps repaired, at $12\frac{1}{2}c.$, \$1.25; 2 oilers, 35c	1 95 2 10	
		9 lengths stovepipes, \$1.35; 1 scuttle, 75c	2 10	
		53 lanterns, at 94c	49 82 3 25	
		A. Abbey, Port Robinson-		59 22
do	1-31	14 lbs. shingle nails, at 4 c., 63c.; 1 oil can, \$1	1 63	
		1 gal. coal oil, 30c.; salt, 20c.; 3 pair hinges, \$1.15 2 lbs. white lead, 20c.; 10 lbs. putty, 50c.; 12 lbs. nails,	1 65	
		48c	1 18 6 00	
		1 box screws, 30c	0 30 0 87	
_	• ••			11 63
do	1-31	Wm. V. Garden, Welland—10 spikes, 50c.; 1 pad lock, 25c. John Mathews, Port Colborne—		0 75
do	1-31	2 hooks and staples, 28c.; 200 spikes, at 4½c., \$9 3 doz. bolts, \$1.50; 1 cupboard lock, 38c	9 28 1 88	
		½ lb. umber, 6c.; 1 lb whiting, 5c	0 11	
do	1–31			11 2' 13 00
		(Above for men away from home working on pile driver at Port Robinson Bridge.)		
do	3	[4 0
do	7	Tug "H. B. Cooke," Port Colborne-Breaking ice and		
_		towing, Foot Bridge		10 0
do	1-31	James Wilson, Merritton— 1232 lbs. holts repaired, at 24c	30 80	
		1232 lbs. bolts repaired, at 2½c	1 65 21 10	
		422 lbs. screw bolts, at 5c	1 44	
		285 lbs. castings, at 3½c	. 1 9 98 1	
		McCleary & McLean, Thorold—		69 1
do	1-31	708 feet pine, at \$16 per M, \$11.33; 552 feet pine, at \$1		
		per M, \$9.66	20 99	
		32c	. 2 24	
		12 toco pase, at 101, 020. , by proceeds at 001, 000		24 9
_		H. Vanderburgh, Allanburgh-		
do	1-31	23 railway fares and return to Port Dalhousie, at 70c 1 do do St. Catharines	16 10 0 45	
		169	.1	16

ACCOUNTS chargeable to Welland Canal, Repairs .- Continued.

Dec. 1-31 To Coy Bros., St. Catharines— 1 keg spikes, 100 lbs., at 5c	D	ate.	Nature of Work.	Amount.	Total.
Dec. 1-31 To Coy Bros., St. Catharines— 1 keg spikes, 100 lbs., at 5c 15 nails, 60c.; 3 packages brads, 36c	1	886.		\$ cts.	\$ ets.
Dec. 1-31 1 keg spikes, 100 lbs., at 5c 5 00 96	•		Old Welland Canal and Feeder.		
James Wilson, Thorold— 10 washers, at 12½c., \$1.25; 7 pack. screws, at 40c., \$2.80 5 packages screws, at 45c., \$2.25; 2 locks, \$3.160; black lead, 15c. 460 1 gal. varnish, \$1; 3½ gals. lard oil, at \$1, \$3.50	Dec.	1-31	1 keg spikes, 100 lbs., at 5c		7 00
lead, 15c	do	1-31	10 washers, at 12½c., \$1.25; 7 pack. screws, at 40c., \$2.80	4 05	5 96
Wm. N. Braund, Dunnville— Galvanized iron chimney top for bridge house			lead, 75c	4 50 22 25 2 16	
James Rolston, Dunnville— 1 keg nails, \$2.75; 4 pad-locks, \$1.90	do	31	Galvanized iron chimney top for bridge house		44 31
1 keg nails, \$2.75; 4 pad-locks, \$1.90				0 15	5 45
6 gals boiled oil, at 80c., \$4.80; 3 gals turpentine, \$3; 2 spades, \$2.80	do	31	1 keg nails, \$2.75; 4 pad-locks, \$1.90		
1 can white lead, \$5.25; \frac{1}{2} \text{gal. knotting, \$2; \frac{1}{2} gal. varnish, \$3 75			6 gals. boiled oil, at 80c., \$4.80; 3 gals turpentine, \$3; 2		
718 lbs. iron, at 2c., \$14 36; 125 lbs. iron, 3c., \$3.75; graining, 50c			1 can white lead, \$5.25; ½ gal. knotting, \$2; ½ gal. var-	_	
1 gal. machine oil, \$1.30; 1 door lock, 75c			718 lbs. iron, at 2c., \$14 36; 125 lbs. iron, 3c., \$3.75; graining, 50c		
McCleary & McLean, Thorold— 4,184 feet pine, at \$16.00, \$66.94; 6,040 feet pine, at \$16.50, \$99.66			lbs. whiting, at 5c., 90c	2 05	
4,184 feet pine, at \$16.00, \$66.94; 6,040 feet pine, at \$16.50, \$99.66. 166 60					63 91
1,030 feet siding, at \$30 30 90	·do	31	4,184 feet pine, at \$16.00, \$66.94; 6,040 feet pine, at \$16.50, \$99.66	14 11 21 88 51 88	
James Wilson, Merritton— 380 lbs. bolts repaired, at 2½c., \$9.50; 2,633 lbs. bolts, at 5c., \$131.65					
do 31 Thos. Hastings, St. Catharines—22 yds. cut stone delivered at St. Paul Street Bridge, Old Canal, at \$7	đo	1-31	380 lbs. bolts repaired, at 2½c., \$9.50; 2,633 lbs. bolts, at 5c., \$131.65	19 92 18 10 0 80	347 07
Staking out Canal boundaries near Lock 16, 17 and 18 Old Canal			at St. Paul Street Bridge, Old Canal, at \$7		185 22 154 00
Nov. 11-12 do do	do Oct.	28 4	Staking out Canal boundaries near Lock 16, 17 and 18 Old Canal	5 00 5 00	25 0 9

ACCOUNTS chargeable to Welland Canal, Repairs.

Date.	Nature of Work.	Amount.	Total.
		\$ cts.	\$ cts.
June 29 Oct. 6 do 12 Dec. 28 Sept. 16 Dec. 7 }	Henry Law, P.L.S., Dunnville— Survey Boomer and St. John mill site, Dunnville Survey of embankments	45 00 5 04	18 00 5 50 16 75
	Total		1,217 43

NUMBER of Pay-list, 161. Pay-list in duplicate of Persons employed on the Welland Canal during the month of January, 1887, to pay Carpenters, Laborers, Teams, &c., chargeable to Renewals and Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Moving bridge tenders' house from old bridge to new at Welland, and repairing air line float bridge, &c	Jan., 1887 do do do d o	Wm. Cook	2 do 1 do 1½ do 6 do	1 25 1 25 1 25 1 25	\$ cts. 7 00 2 50 1 25 1 88 7 50 6 00
do do do do Helping surveyor at Port Colborne harbor, and repairs to air	do	Jno. Barns do		3 00	3 00
line float bridge, &cdo do dodo do do do	do do do	John Cook John Stevens Jas. Dunlap Jerry Chase	4 do	1 25 1 25 1 25 1 25 1 25	4 38 5 63 5 00 0 63
Cleaning snow and ice out of the culverts, &c	do do	Nelson Higgins Richard Higgins Daniel O'Leary R. Stevenson	9½ do 4½ do	1 25 1 25	6 25 11 88 5 63 3 75
Opening up ditches, &c	do	John HoweGeo. Spooner	2 do 3 do	1 25 1 25	2 50 3 75 38 75
lock 12 do do	do	John McMillan Henry Hughes		1 100	19 00 18 00

PAY-LIST in duplicate of persons employed on the Welland Canal, &c.—Continued.

Capa	acity.		When Employ		Names.	Time.	Rate.	Amour	at.
Old Welland an Making and p ary bridge, Ma	utting up tem irlatt's Cross	ipor-					\$ cts.	\$	cts.
taking down o	commencing	new							
one in line the			Jan., 18	387.	F. T. Walton	23 days	2 50		50
₫ο	ďο	•••••	do	•••	S. R. Bradley	223 00	1 75		38
ďο	do	•••••	do		D. S. Walton		1 75		38
, do	do	•••••	do		Edward Smith		1 75		25
do	do	•••••	do	•••	Jacob Wilkerson	2 do	1 00		50
do	do	•••••		•••	Daniel Kelley, team	19 00	3 00		50
do	do	•••••	do	•••	F. T. Walton do	5⅓ do	3 00	16	50
Hydraulic race- the edges of b	oanks and re	mov-			,				
ing anchor ic			١,.		m, 0137 11		1		
whole length,			do		Thos. O'Neil		1 50		50
do	do	•••••	do		Wm. Assell		1 25		38
do	do	•••••	do		Tim. Sullivan		1 25		60
do	do	•••••	do		Fred. Sherer		1 25		38:
do	do	•••••	do		Geo. Boyle		1 25		75
do	d o	•••••	do do		Wm. McClorey		1 25		00.
do	do	•••••	do		James Boyle Michael White		1 25		50
do	do	•••••	do	•••	Jas. F. Boyle		1 25		50
ďο	do	•••••	do				1 25		50
do	do		αυ	•••	Pat Dargan	½ do	1 25	U	63
Cutting ice from			do		W. H. Charles	00 3-	1 05	0.5	
regulating wa			do				1 25 1 25		00
do .	do do	•••••	do		T. Johnson John Sullivan		1 25		88 88
Cleaning snow canal office ye	and ashes o		uo	•••	John Gamvan	-	1 20	10	- 00
away, &c		•••••	do	•••	Thos. Hickey	2 do	1 25	2	50
do Dunnville — Bui gates for the	do ilding new dam &c : re	flood	do	•••	Chas. Hill (team)	4 1 do	3 00	14	25.
ing old flood			do		James Edgar	22 do	1 50	33	00
do	do	•••••	do		John Logan		1 50		50
Painting and	glazing sash	for	~~	•••		- ""		•	-
shop	· · · · · · · · · · · · · · · · · · ·	•••••	do	•••	T. C. Tipton	4 do	1 50	6	00
Removing ice jar					l	. :	. 1		
of the waste we		•	do	•••			1 25		75
do	do	•••••	do		Hiram Fite		1 25		75
фo	do	•••••	do		James Davis		1 25		50
ďο	do	•••••	do		Ed. Webber		1 25		25
ďο	do	•••••	do	•••	Thos. Bessey		1 25		25
do	do		do	•••	Ira Bessey	4 do	1 25	5	00
Inspector of pile					H Vandarburgh	1	75 00 1	h- w	. 00
dam	•••••••••••	•••••	do	•••	H. Vanderburgh	i month	75 0 0	75	00
								674	14

Accounts chargeable to Welland Canal, Repairs.

Date.	Nature of Works.	Amou	nt.	Tota	1.
1887.		\$	cts.		cts
fan. 6–26	To Geo. Gibson, P.L.S., St. Catharines—	•	1	•	-
	8 days making survey of Port Colborne Harbor; taking		. (
	levels and making plan of same and tracing, also plotting and calculating earthwork, at \$5	A	00		
	Railway fares		40		
	Hotel bills		00		
1886.				4	4 40
Oct. 22	John Battle, Thorold—3 brls. cement, at \$1.50				4 50
Dec. 22	Richard Leeson, Merritton-2 cord, hardwood for watch-		!		
TI 70 21	man, at \$5.50	1	1 00		
Iuly 10-31	George Lloyd, St. Catharines— Repairing pitch ladle, 35c.; 3½ ft. iron pipe, at 40c.,				
	\$1.40		1 75		
	2 3-in, caps, \$1: 1 nozzle and couplings, \$1 50		50		
	6 2-in. sockets, 75c.; time cutting pipe: 50c.		1 25		
	6 3-in. sockets, 75c.; time cutting pipes, 50c		45		
	z sneet copper, soc.; s z-m. hippies and elbows, soc	(08 C		
10 0°	I valve, \$1.75; 1 tran 1. nut, 50c.; 4 chimneys, \$1.60	•	3 85		
Aug. 19–25	1 foot iron pipe, 13c.; 2 nipples, 25c.; 3 galvanised col-				
	lars, 75c		1 13		
	3 burner, 60c.; repairing lanterns, 25c		0 83 0 75		
Sept. 6-23	1 tin hax, 40c.: I gauge class 50c. 11 lbs nacking	'	0 13		
	\$1.50.		2 40		
	1 pot, 40c.; 2 pat. cocks, \$1; 1 galv. iron cover, \$2.50		3 90		
)ct. 8-30	41 lbs. rubber packing, at 40c., \$1.70; 1 oil can and pan,				
	6UC		2 30		
	1 pail, 60c.; repairing ga: pipe, 65c.; 1 3-in., 25c		1 50		
Tov. 23-30	1 box, 15c.; mica, 25c.; 1 reducing locket, &c., 23c 1 flue cleaner, \$3; 1 elbow, 15c		0 63		
MG1. 20-00	2 large tin lamps and burners		3 1 5 1 50		
	6 E. & B. lanterns, \$6.75; 1 globe, 30c		7 05		
Dec. 1-15	1 hand-heater, \$10; 121 large pipe, \$1.90	1	i 90		
	1 elbow, 25c.; 1 line platform, \$1.25; 1 coal scuttle		2 50		
	1 shovel, 25c.; 1 damper, 25c.; 1 collar, 10c		0 60		
	1 globe, 20c.; 3 lbs. rubber packing, at 40c., \$1.20; 4				
	feet iron pipe, 60c		2 00 J		
	1 dust-pan, 20c; pot cover, 10c; 1 pan, 25c.; 2 bread pans, 65c				
	5 lbs. line, 50c.; 1 elbow, 25c.; 1 large pipe, 15c.; clout		1 20		
	nails, 15c		1.05	•	
	Covering sky-light		0 25		
				· 5	55 2
lan. 31		i			
	24 lbs chains, at 5c., \$1.20; 2 ice chisels, at 75c. \$1.50		2 70	,	
	1 pole, 25c.; 6 crowbars repaired, at 2½c., 15c	l	0 40		9 1/
do 31	Roger Miller, St. Catharines-				3 10
	12 3-inch gate valves, at \$11 50	l 3	8 00 l		
	197 feet 3-inch pipe, at 44c	. 8	6 68		
	4 3-inch crosses, at \$1.10, \$4.40; 3 3-inch nipples, at	}	ļ		
	65c., \$1 95	1	6 35	t	
	12 3-inch elbows, at 60c., \$7.20; 26 1-inch tees, at 15c, \$3.99		. , ,		
	2 Unions, 60c.; 27 feet 1-inch pipe, at 8c., \$2.16	1	1 10		
	7½ days' time for man coupling and fitting pipes, at \$2	١, ,	2 76		
	1 .3 sums to as the man as the price, at \$2	-	5 00	9.	598
	Above for fitting and attachments, pipe valves, &c., to	1		20	0
	lpumps on pontoons to facilitate filling and emptying water	1	}		
W	tight compartments quickly.	Í	İ		
Nov. 23	To tug "James Norris," St. Uatharines	 '	!	•	
do 24	Towing scow from old to new canal		3 00		
αο 24	do 3 refts dodo schooner "Mary" from Lock to Lock 2	1	6 00		
	at sometimes many item buck to buck Z	1	4 00		13 0

Accounts chargeable to Welland Canal, Repairs-Continued.

D	ate.	Nature of Work.	Amount.	Total.
		Old Welland and Feeder Canal.	\$ cts.	\$ cts.
Jan.	1-31	To James Wilson, Thorold— 224 lbs. spikes, at 4½c., \$10.08; 2 gallons bd. oil, at \$1, \$2	12 08 4 30 1 20 2 16 2 00	
-do	1-31	James Rolston, Dunnville— 472] lbs. iron, at 2c., \$9.45; 87 lbs. iron, at 3c., \$2.61 278 lbs. \$\frac{5}{2}\$-inch chain, at 5c	12 06 13 90 5 11 7 55	21 74
		tar, 30c	3 30 5 75 2 15 3 50	
do	1-31	James Wilson, Merritton— 5,03½ lbs. castings, at 3c	150 96 15 40 11 60	53 32
Jan.	1-31	McCleary & McLean, Thorold— 6,583 feet pine, at \$16, \$105.33; 640 feet pine, at \$17, \$10.88	116 21 77 04 0 78 104 56 16 76 4 50	177 96
-	15-16 15-16	Tug George Douglas, Thorold—Pulling sunken scow out of Port Maitland Lock		319 87 25 00
Jan.	1-31	engaged in removing scow out of Port Maitland Lock James Wilson, Merritton— 125 lbs. screw bolts, at 5c	6 25 15 70	7 50
Jan.	31	F. T. Walton, Thorold—Extra services and overtime in devising and completing two vessels, measuring gauges, and putting them down to Ports Colborne		54 02
Jan.	1-31	and Dalhousie		50 00 17 5 0
		_		1,118 06

PAY LIST in duplicate of Persons employed on the Old Welland and Feeder Canal during the month of February, 1887, to pay Carpenters, Laborers, Teams and accounts, chargeable to Renewals and Repairs.

Capacity.	E	When imploy			Nan	nes.		Т	ime		Rat	е.	Amou	nt.
Repairing waste weir at Lock											\$	cts.	\$	cts
and 3, and sundry repairs	s at									- 1		į		
Canal office; also repai wheelbarrows, &c	TILLE F	eb., 18	37.	Natha	n Mo	rev .		191	dav	s	2	50	45	3 75
do do		do		P. Sh	ortell			ı16	do			75		8 00
do do		do		S. Rac	deliffe	3		8				75		4 00
do do	•••	do	•••	Thos.	Raps	еу	•••••	5				75		8 75
do do	han	do	***	Unas.	Hill,	tean	a	10	do	•••	3	00	3	00 0
Watchman, gate, yard and si	пор,	do		.r w	Row1		{ Jan., Feb.,	31]	59 (3	1	. 00		9 00
St. Catharines Cutting ice from edges of ba	nks.	uo	•••	o	Doy	c ·	₹Feb.,	28	55 (اعرت	•	. 00		<i>3</i> 00
hydraulic race, &c. remo	ving		1					İ						
anchor ice throughout w	hole							ļ		Ì				
length, night and day; also	o re-							1				- 1		
pairing leak in bank of can										- 1		1		
Lock 4, waste weirs, &c. fi								1						
Wells with stone		do		Thos	O'N	il		27 6	Ιοπα	- 1	1	50	A.	0 50
do do		do	•••				•••••••••					25		7 50
do do		do					•••••					25		8 13
do do		do		Wm.	McC:	lorey	·	2	do			25		2 50
do do		do		Jame	s F. I	Boyle		2	do			25		2 50
d o do		do	•••	Robt.	Wils	on		141	do			25	1	8 13
do do	. •••	do	•••	Geo.	Boyle	e	••••••	8	do	••••	. 1	25	1	0 63
Cutting ice from waste w				l				1						
Lock 2; helping to remove	ring							1						
and regulating water du freshets, &c	g	do		lwг	Cha	rleg		110	do	1	,	L 25	١,	2 50
do do		do	•••	T. Jo	hnsoi	1	• • • • • • • • • • •	112	do			25		5 00
do d o		do							do			25		5 00
do do		do					••••		do			L 25		1 2
do do		do					•••••				1	l 25		3 7
do do		do					·····					1 25		5 6
do do	••••	do					7					1 50		4 5
do do Panairina laska in banka of c		do	•••	POUT	W Ca	ver	••••	22	do	•••	١ ٠	1 25	l	3 13
Repairing leaks in banks of c at Locks 15, 17, 23 and								1			1			
waste weirs; also repa	iring			l				1			1		1	
roadway, Lock 17		d o		Jame	s Hai	nilto	n	. 16	đo		l :	1 75	1 2	28 0
do do		do	•••	John	Dun	das		. 11	do			1 25		3 7
do do		фo	•••	Wm.	Gibs	on		. 15	do	•••		1 25	1	18 7
do do	•••	do										1 25		9 3
do do	••••	do	•••	A. B	radie	y	• • • • • • • • • • • • • • • • • • • •	115		•••		1 25		8 7
do do do do		do do	•••	M C	offert		• • • • • • • • • • • • • • • • • • • •	17		•••		1 25 1 25		8 7 5 0
do do		do	•••	Wm	Well	y		1 4	do			1 25		50
do do		do										1 25		1 2
do do		do					am		do			3 00]]	13 5
do d o		$d\mathbf{o}$		John			do		do			3 00		19 5
				l				1			ł			
Putting in foundation for	new			1				1			ŀ		i	
swing bridge and erecting bridge in place of old one,	Mor-			1							1		1	
latt's Crossing	mai-	ob		F. T.	Wa	ton.		. 24	de		1	2 50	1 4	30 O
do do		do	•••					124		,)		1 75		12 0
do do		do	•••	D.S.	. Wal	ton		. 20	de	·		1 75		35 0
do do		do	•••	Ed. S	Smith			. 231	de	· · ·	1	1 75		41 1
do do		đ o	•••	F. SI	huma	מ	••••	. 2		o		1 50		3 0
Painting frame work of	new			m.				1.	_		1		i	
swing bridge	••••••	do	•••	Thos	Gr.	anvil	le	. 9		o		1 75		15 7
Team do		do do					team		ם נ	0		1 75 3 9 0		15 7
Dunnville-Making new w	heel-	, u o	•••	1	• 17 th	· woul,	vсаш.	. 9	a a	o	1		1	28 5
barrows, &c		do		Jas.	Edes	r		.118	a	o	ı	1 50	1 .	27 (
$49d-13\frac{1}{2}$		~~	•••		95			- 1	•	- •••	•		•	

PAY-LIST in duplicate of Persons employed on the Old Welland and Feeder Canal, &c.—Continued.

Ca	pacity.	Whe Emplo		Names.		Time.	Rat	e.	Amount.	
· · · · · · · · · · · · · · · · · · ·				a a teatrage € a	1			_		
waste weirs, wood and rul	m the entrance of also running drift bish from culverts,					Î	\$	cts.	\$ (ts.
&c		Feb., 1		E. Webber		days	1	25	9 :	38
do		do		Jas. Davis		do	1	25	8: 3	13
фo	do	do		Thos. Bessey		đo	1	25	8	13
фo	do	do		Ira. Bessey			1	25	10 (00
_ do	do	do	•••	Jno. Trush	1	do	1	25	1 8	83
Teams hauling	away drift wood	1		11	"			- 1		
and taking to	and from work	do	•••	R. G. Murdy, team	3	do	2	50.	7. !	50
do	do	do	•••	Thos. McDonald, team	2	do	2	50	. 5: (00
	les, Port Dalhousie				ŀ	1		i		• •
Dam	•••••••	do	•••	H. Vanderburgh	1	month.	75	00	75	00
$oldsymbol{Divise}$	ion No. 1.	ŀ		, i				J		
	v and ice out of	do		F. Smith	6.	days	1	25	. 7. !	KO.
do	do	do		C. B. Hare		do		25	3.	
do	do	do		B. Edgraft	3.	do		25	3	
do	do	do	•••	S. Duffin	2	do		25	2 5	
do	do	do		P. Oneth	3	do		25	3	
do	do	do	•••	Geo. Spooner	4	do		25	5 6	
Division	No. 2 and 3.									
Clearing snov	r and ice out of					ŧ			!	
back ditches,	&c	do	•••	Jno. Cook	2.	do	1	50.	3.(00 -
do	' do	do		Jacob Cook	24	do	1	25	. 31	13
do	do	do	•••	M. Trayner	4	do	1	25	5 (00
do	do	do	•••	Jno. Moyer	3	do	1	25	3 7	75.
ďο	do	do	•••	F. Moyer	12		1	25	2 5	50
do	do	do		R. Stevenson		do	1	25	9 3	38
	rt Dalhousie shop	do	•••	Oscar Sharp	28	do	1	25	35 ()0
o do Pa	ttern House, Lock	١.			ı	1		- 1		
	3	do		Jno. McMillan		do		. 20	16 8	
do	do	do	•••	Henry Hughes	14	do	1	20	16 8	30
				:		ľ		· }	1.016.1	7
					Į.	l.		1	1,016 1	

Accounts chargeable to Welland Canal, Renewals and Repairs.

D	ate.	Nature of Work.	Amount.	Total.	•
	887.		\$ cts.	\$	cte
Jan.	1-31	To George Lloyd, St. Catharines—	9.40	-	
		20 lbs. lead pipe, at 10 cts., \$2; 2 nipples, 40 cts	2 40 2 15		
		8 hours' time for man fitting pipe, at 25 cts			
1	886.	D T G. St. L. G. Bi Catharrian		6	55
uly	29	R. H. Smith & Co., St. Catharines— Setting and filing cross-cut saw	0 75		
lug.		G. & H. 13-inch cross saw	0 81		
-				. 1	56
'eb.	3	T. Healey, St. Catharines. 1 pr. hip rubber boots.	li l		
do	9	Henry Carlish, St. Catharines—21 yds. window Holland,		9	50
		2. 20 Ct3	*********	0	90
do	25	McCleary & McLean, Thorold—1,000 ft. pine		17	90
do	28	James Wilson, Thorold—800 steel set serews, at 15 cts	120 00		
		12 steel taps	14 00		
				134	00
do	1-28	Henry Vanderburgh, Allanburg—23 railway fares from Allanburg to Port Dalhousie and return; at 70 cts	44	. 10	10
do	28	Thos. Hastings, contractor, &c., St. Catharines—		16	ΤO
	-0	Mason, 2\frac{3}{4} days, at \$3	8 25		
		Helper, 13 do \$1.50	2 63		
		3 brls. mortar, \$3; 50 brick, 50 cts	3 50 0 50		
		Traditiff marcitat	0.00	14	88
eb.	28	McCleary & McLean, Thorold—			
		1170 ft. pine, at \$16	18 32 5 39		
		290 ft. oak, at \$25, \$7.25; 293 ft. oak, at \$29, \$8.50	15 75		
		1 hour's machine ripping	0 40		
٠.		T William Manufettan		40	26
do	1-28	James Wilson, Merritton— Repairing bolts, 1,200 lbs., at 2½c	30 00		
	- 1	do rods, 256 lbs., at 2c	5 12		
		New straps, 72 lbs., at 4c	2 88		
	- 1	Spike bolts (new), 18 lbs., at 3c Screw do 3,432 lbs., at 5c	0 54 171 60		
	1	Steeling picks, &c., 76, at 6c	4 56		
	- 1	New steel bars, 88, at 20c	17 60		
a .		Towns Million Mounths		232	30
do	1-28	James Wilson, Merriton— 7,043 lbs. castings, at 3½c	246 50		
	į	1 new valve, complete	56 50		
		156 hours' time, machinery work, at 40c	62 40	205	40
do	1-28	Tamos Wilson Thorold		365	40
40	1-20	James Wilson, Thorold— 1 brush-broom, 75c.; 26 lb. chain, at 7c., \$1.82	2 57		
	1	4 galls. B. oil, at \$1, \$4; 6 pick handles, at 25c., \$1.50	5 50		
	- 1	Paper rubbers and pencils, \$1; 8 drop black, at 25c., \$2.	3 00 1 14 00		
		150 lbs. white lead, at 8c., \$12; 2 galls. turpentine, \$2 Paid railway fares, Pt. Colborne and return, for foreman	2 00		
_	ļ	• '		27	07
do	9	Richard Leeson, Merritton—			۲A
	- 1	1 cord hard wood for watchman		0	50
do	1-28	James Rolston, Dunnville-			
	1	1 pair knobs, 50c.; 1 basket, 50c.; 1 shovel, \$1	2 00		
	1	10 lbs. nuts, at 4c., 40c.; 6 lbs. chain, at 8c., 48c.; 50	2 42		
	l	c. c. bolts, \$1.54	4 74		
	İ	at 15c., 60c	15 85		
		2 gross screws, 75c.; 25 lbs. steel, at 4c., \$1	1 75		
	1	53 lbs. band iron, at 3c., \$1.59; 121 lbs. corn iron, \$2.42	4 01	26	03

Accounts Chargeable to Welland Canal—Renewals and Repairs—Concluded.

Date.	Nature of Work.	Amount.	Total.
Jan. 20–27	John Shickluna, St. Catharines— Horse and buggy	\$ cts.	\$ cts.
Feb. 3-28	Wm. Swartz, Byng— 64 lbs. staples and bolts, at 7c., \$4.48; 6 cant hooks, at 50c., \$3	7 48 3 36	
do 1–28 do 28	McCleary & McLean, Dunnville— 2,040 ft., 6 x 12 in., and 2 x 12 in., oak, at \$25 2,000 ft. 2-in. oak plank, at \$20 Chatfield & Neelon, St. Catharines— 6 ft. pipe, at 10c., 60c.; } doz. hose clip, 25c	51 00 40 00	11 04·
	1 cast sink, \$2.50; 1 pr. sheet rubber, 10c	2 60	3 45
			1,000 54

NUMBER of Pay-list, 167. Pay-list in duplicate of Persons employed on the Old Welland Canal and Feeder during the month of March, 1887, to pay Carpenters, Laborers, Teams, &c., chargeable to Renewals and Repairs.

Capac	ity.		Whe Emple		Names.	T	ime.	Rate	·	Amou	n t.
Putting in two ne	w bents s	nd two						\$	cts.	\$	cts
new wings and	d new t	ops on			Í				- 1		
bridge between					1	1	- 1		ı		
joining ponds,	and taki	ing out				!	- 1		- 1		
in new planking									- 1		
to support emb	ankment	s. Acc	Mar.	1887	Nathan Morey	. 29	davs	2	75	79	75
do	do		do	•••	P. Shortell	. 26½	do		00	53	3 00
do	do	•••••	do	•••	S. Radcliffe	. 261	do		00		3 00
фo	do	******	do	•••	T. Rapsey	$.25\frac{1}{2}$	do		00		00
do	do	•••••	do		W. H Charles		do		00		00
do Watahman gata :	do	•••••	do do		Chas. Hill, team		do		00		5 00 L 00
Watchman, gate : Laborers—Excavi	ating es	rth at	uo	•••	J. W. Boyle	. 31	do	•	· 1	0.	
each end of ne	ew bride	re near					i		1		
Weavers Point							1		- 1		
penters to re-bi	iild abut	ments;							1		
repairing town			_		m, 0137 "	0	, 1		,, 1	نو	
levels 1 and 2			do		Thos. O'Neil				75		5 13
do	do	*****	do		Wm. Assell		do		25 25		31 2 50
do do	do do	•••••	do do		Robt. Wilson		do		25		5 00
do	do	•••••	do		Michael White		do		25		6
ďo	do	*****	do		Wm. McClorey		do		25		1 3
do	do	*****	do		Alex. Walker		do		25	3	3 13
do	фo	•••••	do		Tim Sullivan		do		25		5 00
do	do	•••••	do		T. Johnson		do		25		3 50
do	do	•••••	do		Jno. Sullivan		do		25 25		3 13
do Watc hiug water,	do Lock 2	•••••	do do		James Boyle John Weaver		do		25		3 50) 63
do		•••••••	do		Peter Weaver		do		25		63
Teams			do		Jno. Bradley		do		00		3 00
do			do		Ham Page		do	3	00	5	00
Quarrying out s			_				. !	_			
repairs, &c			do	•••	Jas. Hamilton	27	do		75		7 20
do	do	•••••	do	•••	Arthur Bradley	234	do		25 25		38
do do	do do	•••••	do do		Jas. Faywell Wm. Gibson		do		25		3 28 3 13
do	do		do		F. Dosical		do		25		B 7:
do	do	•••••	do		Ab. Bradley		do		25	25	5 0
do	do	*****	do	•••	Ed. McLaughlin	. 10}			25		3 13
do	фo	*****	do		Martin Nestor		do		25		3 1
ďο	ďο	•••••	do		Jerry Laughey		do		25		6 24 8 7
d o	do	*****	do		Jas. Reynard		do		25 25		9 3
do do	do do	*****	do do	•••	A. W. Bradley Clarke Dennis	. 8			25		0 6
do	do		do		Lewis Tenbrook, tea		do	3	00	24	4 0
D		_				1	.		- 1		
Carpenters — Pu swing bridge						ı	į				
Marlatts Cross						.	i		į		
new approache	s to same	; fram-					1		į		
ing new valves			1				.	_		_	
Lock 25	••••••	•••••	do	•••	F. T. Walton	. 27	do		75	74	4 2
ďο	d		do		S. R. Bradley		do		00		40
do		0	do		D. S. Walton E. Smith		do		00		40 80
do do		o	do do		J. Brenan		do		25		31
de		_	do		N. Higgins				25		18
do	. đ			•••	Angus Fox	∣2¯	do		25	:	2 5
ďo		0	do	•••	E. Higgins	2	do		25		25
do		o	ـ د ا	•••	F. T. Walton, team.	14	do		00		2 0
do		0	, do		John Coyle do .		do	2	00	2	10

PAY LIST in duplicate of persons employed on the Welland Canal, &c.—Continued.

	Capac	eity.		Whe Emplo		Name.	7	lime.	Rat	e.	Amou	n£.
### Characteristics Characte	Onnamilla Danai	-:	!4	1887	7.				\$	cts.	\$	c ts .
Sates, making punts, &c. March James Edgar. 194 do 150 29 25 do do do do Chas. Trity 57 do 150 39 00	the bridges and	ring cover	ing or				1	I				
Go	gates, making	punts. &c.	·····	March		James Edgar	193	do	1	50	90	95
Case Case												
Section entrance of waste weirs, &c												
Go Go Go Go Go Go Go Go	ice from entra	ance of	waste							İ		
do	weirs, &c	••••	••••••								20	63
Ditting up old lock gates and taking ironwork off, and storing same away; repairing awing bridge at Lock 1, old Canal												
Dutting up old lock gates and taking ironwork off, and storing same away; repairing swing of do do do do do do do do do do do do do												
taking ironwork off, and storing same away; repairing swing bridge at Lock 1, old Canal do do do do do do do do do do do do do				ao	•••	T. McDonaid, team	22	ao	2	50	6	5 25
Dridge at Lock 1, old Canal do do do do do do do do do do do do do	taking ironwork	off, and s	toring					1		ł		
do						John Porton	07	امها				
do					•••	Thos. Williams	261	do				
do do do do do do do do					•••							
Association Association												
Natchmen, shop and yard, Port Dalhouse, pattern house, Lock 13			•••			Phil. Ohnith	27					
do	Dalhousie, patte	ern house,	Lock									
According to the provided and												_
Depining wheelbarrow do Ed. Smiley 13 do 2 00 26 00		2 '										
Daihousie												
Port Robinson bridge	nspector piles a	nd dams,	Port	_		}	ĺ					
do do do do John Sutton 2 do 1 50 3 3 3 3 3 3 3 3 3	Priving piles al	ong appr	oach,				~		•••	, 00	•••	, ,
Co do do do do do do John Sutton 2 do 1 50 3 00		bridge		do	•••			days	2	25	€	3 75
do			•••••					do]	L 50		
Comparison of the color of th		-										
Comparison of the color of th			Ar o									
Dening bridges and ferry to allow contractors' tugs, &c., to pass through	do do	ung bues,			•••	P Tackson	1 :					
Dening bridges and ferry to allow contractors' tugs, &c., to pass through	2 *				•••	Wm. Abbey	1					
Ceorge Thompson	allow contracto	and ferr	c., to		•••							
Cast Arc Corps Cook	pass through				•••	James Edmonds	6	do	1	L 25	,	7 50
Division No. 4.					•••	George Thompson	6			1	,	7 50
Setting floats in place; removing float bridge, Air Line Ferry, and pulling ferry scow in place and clearing out back ditches, east side canal, &c	uo	uo	*****	do	•••	Kobt. Stevenson	10	do		1 25	12	2 50
State Stat	$oldsymbol{D}$ ivision	No. 4.										
do do John Cook 4½ do 1 25 5 63 do do James Dunlap 2½ do 1 25 3 13 do do Wm. Decks 4 do 1 25 5 12 do do E. Bonaberg 5 do 1 25 6 2 do do B. Simpson 6 do 1 25 7 5 do do Jerry Brennan 3½ do 1 26 4 33 do do John Moyer 4 do 1 25 5 0 do do Frank Moyer 4 do 1 25 5 0 do do M. Anthes 2 do 1 25 1 25 do do M. Traynor 2 do 1 25 1 25 do do M. Traynor 2 do 1 25 2 56 do R. Gillis 1 ½ do 2 00 3 0	float bridge, A and pulling fer and clearing or	dir Line in ry scow in ut back di	Ferry, place tches,			Jacob Cook	8	đo		1 25	1	0 00
do do James Dunlap 21/4 do 1 25/5 50 3 13/6 do 1 25/5 50 3 13/6 do 1 25/5 50 3 13/6 do 1 25/5 50 5 00 1 25/5 50 5 00 1 25/5 50 6 22/5 62 6 22/5 62 6 22/5 62 6 22/5 62 6 22/5 62 7 5/6 62 6 20/5 62 7 5/6 62 <		_	•••••		•••	John Cook	4	do		. 1		5 63
do do								do				3 13
do do					•••	wm. Decks	4					
do do	2 -				•••	R Simpson	5					
do do			*****		•••	. Jerry Brennan	37					
do do					•••	John Mover	4					
do do do M. Anthes. 2 do 1 25 2 50 do do do	_	do			•••	Frank Moyer	4					
do do do Isaac Shisler 1 do 1 25 1 25 do do do M. Traynor 2 do 1 25 2 50 3 00 3 00 3 00 00			•••••		•••	M. Anthes	. 2	do				
do			•••••		•••	Isaac Shisler	1	do				
			•••••		•••	M. Traynor	2	do				2 50
3 00 6 00 mg am Uook, team 2 do 3 00	Caserment letra ac		*******					do				3 00
		4		(00	•••	Joan Cook, team	. 1 2	ao!		3 OO I	. (K M

Accounts chargeable to Welland Canal-Repairs.

Date.	Nature of Work.	Amount.	Total.
1887.	To Car Prog. St. Catherings	\$ cts.	\$ cts
January 1 March 31	To Coy Bros., St. Catharines— 1 anvil, 193 lbs., at 12½c	12 88 5 75 4 30 1 70 3 88 18 70 7 20 22 40	•
Mar. 1-31	211 lbs. manilla rope, at 15c	31 65 3 60 21 25 3 50 3 75 1 55	108 46
January 1 } March 31 }	John Mathews, Port Colborne— Drawer lock, 40c.; 1 rim lock, 40c.; package brads, 13c. 600 lbs. coal, \$1.80; 1 gall. turpentine, \$1; 1 bill, 22c 2 galls. boiled oil, \$1.60; 22 lbs. white lead, at 7c., \$1.54 1 door knob and acrews, 23c.; 3 lbs. manilla rope, 38c	0 93 3 02 3 14 0 61	33 65
do 1- 31	James Wilson, Merritton— 192 lbs. screw bolts, at 5c	9 60 0 20 0 40 9 98 15 20	7 70 35 3 8
do 1-31	Henry Vanderburgh, Allanburgh, 26 railway fares to Port Dalhousie and return, at 70c		18 20
February 1 }	To Coy Bros., St. Catharines— 1 snow shovel, 60c.; 2 thumb latches, 30c.; 1 pair butts, 12c. 2 lbs. wrought nails, 20c.; shellac, 25c.; sash tool, 20c 12 gals. mixed paint, \$2.50; 2 lbs. putty, 10c.; 6 lights	1 02 0 65	
	glass, 88c. 640 ft. wire sash cord, at 4c. 2½ lbs. steel, 38c.; hooks and eyes, 25c.; emery cloth, 48c. Gross screws, 45c.; 8 coffee sacks, \$1.60; 15 lbs. wrought nails, \$1.20. 4 kegs blasting powder, \$16; 200 ft. fuse, \$4. 448 wrought spikes, at 5c, \$22.40; 1 boring machine, \$9.50. 2 ship augers, \$3.80; 1 buck saw, 75c	3 48 25 60 1 11 3 25 20 00 31 90 4 55	91 56
Mar. 1-31	1 axe handle, 25c	3 88 4 90 3 95 2 50	01 00
	\$2; 12 cabbages, 60c	8 68	
	10 lbs. salt, 10c.; 1 lb. mustard, 40c.; 2 bars soap, 50c; 1 gall. vinegar, 40	1 40	l

Accounts chargeable to Welland Canal, Repairs-Continued.

Mar. 1-31 To James Wilson, Thorold— 1 gall. syrup, 80c.; 12 lbs. butter, \$3; 10 lbs. rice, 50c.; 10 lbs. cod fish, 80	D	ate.	Nature of Work.	Amount.	Total.
To lbs cod fish, 80	1	887.	To James Wilson, Thorold—	\$ cts.	\$ cts.
2 doz. herrings, 50c.; 3 bush. potatoes, \$2.40; 1 bush. turnips, 35c.	Mar.	1-31	10 lbs. cod fish. 80	5 20	
12 loaves bread, at 11c., \$1.32; 1 lb. pepper, 30c; 15 1bs. biscuits, at 10c., \$1.50			2 doz. herrings, 50c.; 3 bush. potatoes, \$2.40; 1 bush.	3 25	
1½ bush. green apples, \$1.20; 1½ bush. dried apples, \$1			12 loaves bread, at 11c., \$1.32; 1 lb. pepper, 30c; 15		
James Rolston, Dunnville— 215 lbs. wrought spikes, at 5c., \$10.75; 4 gross screws, \$1.55		!	Ibs. biscuits, at 10c., \$1.50	3 12 2 20	
215 15 15 15 15 15 15 15					45 68
\$1.55	đo	1-31			
R. H. Smith, & Co., St. Catharines—2 cross-cut saws			\$1.55	12 30	
Welland Vale Manufacturing Co., St. Catharines—Repairing and straightening rods McCleary & McLean, Thorold— 11,614 ft. pine, at \$16. 185 84 2,181 do at \$18 39 26 33 do at \$30 0 99 1,115 ft. oak, at \$25. 22 88 590 do at \$27. 15 93 236 do at \$28. 661 254 do at \$29. 7 37 James Wilson, Merritton— 265 lbs. straps repaired, at 2c. 5 30 310 lbs bolts do at 2½ 7 52 465 lbs. rag bolts (new), at 3c. 13 95 394 lbs. strap and plates (new), at 4c. 15 76 1,603 lbs. screw bolts (new), at 5c. 80 15 174 lbs. bar steeling, at 6c. 10 44 54 lbs. bar steeling, at 6c. 10 80 Foundry work— 624 lbs. castings, at 3½c. 21 84 180½ hrs. time drilling, boring, filing and machinists, at 40c. 72 20	_				19 90°
Ing and straightening rods McCleary & McLean, Thorold— 11,614 ft, pine, at \$16			R. H. Smith, & Co., St. Catharines—2 cross-cut saws Welland Vale Manufacturing Co., St. Catharines—Repair-		5 00
do 31 11,614 ft. pine, at \$16 185 84 2,181 do at \$18 39 26 33 do at \$30 0 99 1,115 ft. oak, at \$25 22 88 590 do at \$27 15 93 236 do at \$28 6 61 254 do at \$29 7 37 James Wilson, Merritton— 265 lbs. straps repaired, at 2c 5 30 310 lbs bolts do at 2½ 7 52 465 lbs. rag bolts (new), at 3c 13 95 394 lbs. strap and plates (new), at 4c 15 76 1,603 lbs. screw bolts (new), at 5c 80 15 174 lbs. bar steeling, at 6c 80 15 174 lbs. bar steel (new), at 20c 10 80 Foundry work— 624 lbs. castings, at 3½c 21 84 180½ hrs. time drilling, boring, filing and machinists, at 40c 72 20	u.	••••	ing and straightening rods		2 00
2,181 do at \$18	do	31	McCleary & McLean, Thorold— 11,614 ft. pine, at \$16	185 84	
1,115 ft. oak, at \$25			2,181 do at \$18	39 26	
15 90 236 236 236 237 238 23					
254 do at \$29			590 do at \$27	15 93	
James Wilson, Merritton— 265 lbs. straps repaired, at 2c					
James Wilson, Merritton— 265 lbs. straps repaired, at 2c			204 UO 81 \$25	7 37	283 86
31 265 lbs. straps repaired, at 2c			James Wilson, Merritton-		200 00
465 lbs. rag bolts (new), at 3c	do	31	265 lbs. straps repaired, at 2c		
394 lbs. strap and plates (new), at 4c					
1,603 lbs. screw bolts (new), at 5c					
174 lbs. bar steeling, at 6c			1,603 lbs. screw bolts (new), at 5c	80 15	
Foundry work— 624 lbs. castings, at 3½c			174 lbs. bar steeling, at 6c	10 44	
624 lbs. castings, at 3½c				10 80	
at 40c			624 lbs. castings, at 3½c		
			88 - 12 U · · · · · · · · · · · · · · · · · ·	12 20	237 96
I 889 3			·		889 35

PAY-LIST in duplicate of persons employed on the Welland Canal and Feeder during the month of April, 1887, to pay Campenters, Laborers, Teams, and accounts, chargeable to Renewals and Repairs.

Capaci	ty.		Whe Emplo		Names.	Time.	Rate.	Amount.
Completing new t below Lock 2; and building ter with footpath a while St. Paul S abutment, north down preparati	driving pil mporary bi cross old o t. Bridge r end, was t ve to bein	le for ridge canal coller aken g re-					\$ cts.	\$ cts.
built with rock	k face a	shlar	A	1007	N C			OF 04:
masonrydo	do	•••••	do	1001	N. Morey, forman P. Shortell	314 days	2 75 2 00	85 94` 44 50
do	do	•••	do	•••	S. Radcliffe	31 do	2 00	62 00
do	do	•••	do	•••	T. Rapsey,	283 do	2 00	57 50
do do	do do	•••	do do	•••	W. H. Charles W. McClorey	19¾ do	2 00 1 50	39 50 13 50
do	do	•••	do	•••	R. Bradlev	5 do	1 50 1	7 50
₫ο	фo	•••	do	•••	C. W. Bradley	5 do	1 50	7 50
do do	do	•••	do	•••	B. Clarke	5 doj	1 50	7 50
do	do d o	•••	do do	•••	Ed. McLaughlin Chas. Hill, team	1001 3-	1 50 3 50	7 50 102 38
Watchman		•••	do	•••	J. M. Boyle		1 00	30 00
Filling up approace path bridge relating for new for end abutment, so bridge; clearing wiers near Lock	ouilt; excandation rest. Paul Sing out v. 2, also Lo	avat- lorth treet vaste	1.			_		
chamber, &c do	do	• • • • • • •	do	•••	Thos. O'Neil, foreman		2 00	66 00
do	do	•••	do	•••	Wm. Assell R. Wilson		1 25 1 50	18 75 36 75
do	do	•••	do	•••	Geo. Boyle		1 50	36 75
do	do	•••	do		Tim. Sullivan		1 50	31 88
do do	do do	•••	do do		Jno. Sullivan	17f 3_ 1	1 50	28 88: 25 88:
do	do	•••	do		James Boyle, jr		1 50 1 50	20 25
₫ο	ďο	•••	do	•••	Jno. Weaver	32½ do	1 50	48 75
do do	do	•••	do		Peter Weaver		1 50	37 50
do	do do	•••	do do	•••	James Boyle Wm. Enright		1 50 1 50	27 38 20 25
do	do	•••	do		A. O'Malia	20 do	1 50	30 00
do	do	•••	do	•••	E. O'Malia	18 do	1 50	27 00
do do	do do	•••	do do		M. White	1012-1	1 50	10 50 12 75
do	do	•••	do		Rich. Grant K. Vigrass		1 50 1 50	15 75.
фo	фo	•••	do		H. Beattie		1 50	8 25
do	do	•••	do		Jerry Sullivan		1 50	19 50
do do	do do	•••	do do	•••	Jordon Dittrick Fred Shewn		1 50 1 50	10 13 7 50-
do	do	•••	do		J. Kelleen		1 50	19 88
do	do		do		Thos. Daigan		1 50	1 50
Teams; hauling Paul St. Bridge	stone for and Martin							
Creek Bridge			do	•••	Wm. Belton	7¾ do	3 50	27 13°
do	do	•••	do	•••	Jno. Belton	5¾ do	3 50	20 13
do do	do do	•••	do do	•••	Thos. Johnson Jno. Johnson	31 do	3 50	11 38
do	do	•••	do	•••	Geo. Shickluna	34 do	3 20 3 50	15 75 13 13
ďο	do	•••	do	•••	Joseph H. Smith	2 do	3 50	8 75
do Quarrying out ato	do		do	•••	John O'Brien	64 do	3 50	23 63
Quarrying out sto	naira &c	ieral	do		Jas. Hamilton	26 do	2 00	52 00
<u>qo</u>	do	•••	do	•••	Arthur Bradley	224 do	1 50	34 13
ďo	do		do	•••	Wm. Gibson Fred. Dosical	61 do	1 50	9 75
do	do		i do				1 50	11 15

PAY-LIST in duplicate of persons employed on the Welland Canal, &c.—Continued.

Capacit	y.		Wher Employ		Names.	Time.	Rate.	Amount.
Quarrying out stor	ne for gene	rai					\$ cts.	\$ cts
renewals and repa	airs, &c		April, 1	887	Ab. Bradley	19 days	1 50	28 50
do	do		do	•••	Ab. Bradley Jerry Laughey	241 do	1 50	36 38
₫o	do		do		James Reynard	17 ‡ do	1 50	25 88
do do	do	••••	do	•••	Clarke Dennis	242 00	1 50 1 50	36 38 3 3 38
do	do do		do do		James Faywell John Dundas		1 50	24 00
do	ďo	•••	do		Wm. Winslow		1 50	15 00
ream	•• ••••		do		Lewis Tenbrook		3 50	71 75
Driving piles for no bridge and St. Bridge north and	Paul Str	eet	9.		Ludra e v 145 - S		0.05	
Bridge, north end	do	ac.	do do	•••	W. H. Tinlindo		2 25 2 0 0	66 63
go	do	•••	do	•••	doAlf. Tinlin	17. do	1 50	26 25
do	ďo		do	•••	John Sutton		1 50	24 75
do	do		do	•••	do (horse)		1 50	24 75
stopping up leaks i	n canal ba	nks	ľ		1.	-		
and general repa	irs from L	ock			a market in the same],,, a -	1 50	
22 to Allanburgh	, &c	•••••	do		Arthur Bradley		1 50 1 50	25 50
do do	do do	•••	do d o	•••	Patk. Griffin John Brenan	18 do	1 50	27 00 24 08
go	ďó	•••	do		Robert Pew		1 50	27 75
do	ďó	•••	do		Wm. Clarke		1 50	27 75
do	_ do _	•••	do	•••	P. McMahon (team)	. 1 do	3 50	3 59
Caulking scow "S	ır John ''	••••	do	•••	Alex. Walker	. 3½ do	2 00	7 00
shore braces; copiles forming a Port Robinson S putting on new walings and cups and replacing sh braces to lower	and stron ; rearrang ort end sh level; rep	ge; ger ing iore air-						ű.
ing scow "Sir C	harles,'' & c	Š,	do	•••	F. T. Walton, foreman	1 24 do	2 75	66 60
do	do	•••	do		S. R. Bradley		2 00	56 00
go go	do do	•••	do	•••	D. S. Walton E. Smith	. 28 do	2 00 2 00	56 00 47 00
go	ďo	•••	do	•••	Wm. Dunn	. 30 do	2 00	60 00
do	đo	•••	do	•••	Benj. Baker	. 231 do	2 00	47 00
₫ο	đó	•••	do	•••	R. Jackson	. 23½ do	2 00	47 00
do	đọ	•••	do	•••	B. O'Leary	. 13 _. do	2 00	26 00
do do	d o	•••	1 4.		S. J. Hill		1 7 77	16.63
do	do	•••	1 2.	•••	Wm. Abbey F. Shueman	. 23½ do . 26 do	1 75	41 13 45 50
do	do		1 30		R. McPherson		1 50	9 75
do	do	•••	1 34	•••			1	12 00
фo	do				Nelson Higgins	. 9 do	1 50	1,3 50
do	do	•••		•••	G. W. B. Jordon	. 26 do		39 00
Teams, &c	•••••	•••••	do	•••	John Coyle	. 19½ do	1 7 20	68 25
do Repairing old lock I Port Dalhousie	l swing bri	dge,	do	•••	F. T. Walton James Hindson	. 4 do	1 50	36 00
do do	do	•••••	do	•••	W. L. Smith		1 75	7 4
Cutting up old loc and taking off i storing same as	ron work way, repai	and	1.					9
3-7-3-8	,		do	•••	John Paxton	. 13 do		22 7
banks, &c	do	•••	do	•••	Thomas Williams	. 13 do	1 50	19 5 12 7
banks, &c do								
banks, &c do do	do	•••		••	Geo. Howe	84 do		12.7
banks, &c do do do	do do	•••	do	••	Frank Darby	. 113 do	1 50	1,95
banks, &c do do	do	•••	do	••:	Frank Darby Phil Ohnits Samuel Duffin	. 13 do	1 50 1 50	12 7 19 5 19 5 12 0

PAY LIST in duplicate of persons employed on the Welland Canal, &c .- Continued.

redging ont bottom Junction April, 1887 James Clancey 18 days 2 00 36 00 do do do do do do do		Capac	city.	When Employ		N,	ames.		T	ime.		Rate	•	Amou	ıt.
lock, chamber and aprons	lock, chamber and aprons.		-44 T41			-					- -	\$	cts.	\$	cts
do do do do do do do do	do do do do do do do do	reaging out be	ottom Junction	Amell 10	007	Tamas C	lancav		18 6	o ve	. 1	•	00	36	00
do	do do do do do do do do				óó i	Hnoh Ba	ilev		16	dò			L		
do	Thos. Waldron				•••	M. Blake			16	3 .					
do	do				•••	Thos. W	aldron	1	16						
do	do				•••	Geo. Nol	lan		16	1 -		1	50	24	00
unnville—Building 12 new ice breakers for dam; repairing top covering stationary bridges, also guard lock gates					•••	Wm. Pev	w		16	do		1	50	24	00
Dreakers for dam; repairing top evering stationary bridges, also guard lock gates	Dreakers for dam; repairing top covering stationary bridges, also guard lock gates														
top eovering stationary bridges, also guard lock gates	top covering stationary bridges, also guard lock gates			1							- 1		ſ		
A	do	top covering sta	tionary bridges,	1 .							- 1				
do	do				•••	James E	dgar		24	do	••••				_
do	do				•••	Bichard	Mitche	ell	442						
					•••	T C T	1111B	•••••	0	3 -					
ing ice jams from entrance of waste weir, and repairing bank along feeder, &c	ing ice jams from entrance of waste weir, and repairing bank along feeder, &c				•••	, L. O. I	тħюп"	•••••	1 0	uo		1	30	•	, 00
### with the pairing bank along feeder, &c	### with the parting bank along feeder, &c	ing ice jame fi	rom entrance of	1		ĺ			ł		- 1		- 1		
along feeder, &c	along feeder, &c					1			1				- 1		
do do do do l'25 do 1 25 le 29 o 20 do 1 25 le 29 o 1 25 le 2 do 2 25 le 2 do 2 25 le 2 do 2 25 le 2 do 2 25 le 2 do 2 25 le 2 do 2 25 le 2 do 2 25 le 2 do 2 25 le 2 do 2 25 le 2 do 2 25 le 2 do 2 25 le 2 do 2 25 le 2 do 2 25 le 2 do 2 2 do 2 2 do 2 2 do 2 2 do 2 2 do 2 2 do 2 2 do 2 2 do	do do do do John Henderson 13 do 1 25 29 do do do do John Henderson 13 do 1 25 14 do do do do E. Wébber 11 do 1 25 14 do do do John Burnham 8 do 1 25 14 do 1 25 14 do 1 25 14 do 1 25 14 do 1 25 14 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 4 do 1 25 1 1 do 2 20 2 6 2 6 2 6 2 7 do 2 5 do 1 25 1 25 1 25 1 25 1 25 1 25 1 25 1 25 1 25					John Th	rush		26	do	4	1	25	32	50
Color Colo	do				•••	Ira Besse	e y		231	do	- 1				
do	do		4.	1 40	•••	John He	nderso	n	13	do	i				
do	do		·	ملة ا	•••	E. Web	ber	•••••	1113	do					
eams hauling material for repairs, also hauling rubbish, &c., odo do do do do M. A. Smith, team 10½ do 2 50 12 5 do 1 50 12 5 do 2 50 12 5 do 1 50 12 5 do 2 50 12 5 do 1 50 12 5 do 2 50 12 5 do 1 50 12	eams hauling material for repairs, also hauling rubbish, &c., odo do do do do do do NE GIVETS	do]	. 1	25	10	0 (
pairs, also hauling rubbish, &c., out of culverts	pairs, also hauling rubbish, &c., out of culverts	eams hauling	material for re-	-1		1			ì				- 1		
According to the content of the co	Division No. 3. Clearing out ditches, repairing banks, &c. taking down stone wall, Port Robinson swing bridge, to admit lowering shore braces, &c					L			! .	_	- 1	_	l		
Clearing out ditches, repairing banks, &c. taking down stone wall, Port Robinson swing bridge, to admit lowering shore braces, &c	Clearing out ditches, repairing banks, &c. taking down stone wall, Port Robinson swing bridge, to admit lowering shore braces, &c							eam	10	do,					
New Welland Canal. Division No. 3.	New Welland Canal. Division No. 3. Stearing out ditches, repairing banks, &c. taking down stone wall, Port Robinson swing bridge, to admit lowering shore braces, &c. do							do	5	ďο					
Division No. 3.	Division No. 3.			. ao	••	T. MCDC	onald	ao	9,	αo		Z	90	27	4 DI
Clearing out ditches, repairing banks, &c. taking down stone wall, Port Robinson swing bridge, to admit lowering shore braces, &c	Clearing out ditches, repairing banks, &c. taking down stone wall, Port Robinson swing bridge, to admit lowering shore braces, &c					ľ						1			
banks, &c. taking down stone wall, Port Robinson swing bridge, to admit lowering shore braces, &c do do do 21 do 2 00 42 do 43 do 45 do 150 do 30 do 30 do 30 do 30 do 30 do 30 do 30 do 30 do 30 do 30 do 30 do 30 do 30 do 31 do 150	banks, & C.; taking down stone wall, Port Robinson swing bridge, to admit lowering shore braces, & C. do do do 21 do 2 00 42 do do do do Geo A Jordan 25 do 1 75 43 do do do Jno. Madigan 20 do 1 50 30 do do do Geo. Brown 21 do 1 50 30 do do do Benj. Redfern 23 do 1 50 30 do do do Geo. P. Misner 7 do 1 50 30 do do do James Hansell 20 do 1 50 30 do do do Geo. P. Misner 7 do 1 50 30 do do do Geo. Thompson 13 do 1 50 19 do do do Geo. Thompson 13 do 1 50 19 do do do R. Stevenson 14 do 1 50 10		*									1			
wall, Port Robinson swing bridge, to admit lowering shore braces, &c	wall, Port Robinson swing bridge, to admit lowering shore braces, &c. do do	Clearing out di	itches, repairing	3					1		١	1	1		
bridge, to admit lowering shore braces, &c	bridge, to admit lowering shore braces, &c					1			1		- 1		i		
Division No. 4. Caking off old decayed sheeting, Harbor Master's House, and putting on new; tightening up windows, and general repairs do do do do do do do do do do do do do	Division No. 4. Canalization No. 4. Ca								ì		- 1		- 1		
do do do do do do Jno. Madigan	do do do do do do do do	braces &c	it to wetting short	40		R. A. R	ooth		121	ďο		9	on l	4	2 8
do do do do do Geo. Brown 21 do 1 50 30 60 do do do do do do do d	do do do do Geo. Brown 21 do 1 50 30 do do do do Geo. Brown 21 do 1 50 31 do do do do James Hansell 20 do 1 50 34 do do do Geo. P. Misner 7 do 1 50 10 do do do Geo. P. Misner 7 do 1 50 10 do do do Geo. P. Misner 7 do 1 50 10 do do do Geo. A. Upper 8 do 1 50 19 do do do do Alfred Upper 7 do 1 50 21 do do do do Dan. Kelly, team 9 do 3 50 31 Division No. 4. Taking off old decayed sheeting Harbor Master's House and putting on new; tightening up windows, and general repairs do Jacob Cook 13 do 1 50 19 do do do do Jacob Cook 13 do 1 50 19 do do do do Jacob Cook 13 do 1 50 19 do do do do Sam. Cook, team 84 do 1 50 28 Inspector of piles, Port Dalhousie do H. Vanderburgh 1 month 75 75 75 do pattern house, Lock 13 do Jacob Gook 14 do 2 200 34 H. Vanderburgh 1 month 75 75 75 75 75 75 75 7				••	Geo. A.	Jords	in	25						
do do do do James Hansell 20 do 1 50 31 6 6 6 6 6 6 6 6 6	do do do do James Hansell 20 do 1 50 30		a.	4.											
do do do do do do Benj. Redfern 23 do 1 50 30 (do do do do do do do do	do do do do do do Benj Redfern 23 do 1 50 30 do do do do Geo P. Misner 7 do 1 50 10 do do do do Geo P. Misner 7 do 1 50 10 do do do do Geo P. Misner 7 do 1 50 10 do do do Geo Redfern 1 3 do 1 50 10 do do do Geo A. Upper 8 do 1 50 12 do do do do Geo A. Upper 8 do 1 50 12 do do do do do do do				••	Geo. Br	own		. 21						
do do do do Geo. P. Misner 7 do 1 50 34 fe do do do Geo. P. Misner 7 do 1 50 10 fe do do do do Geo. Thompson 13 do 1 50 19 fe do do do Geo. A. Upper 8 do 1 50 19 fe do do do do do do do do	do do do do Geo. P. Misner 7 do 1 50 10		<i>a</i> .	1 -							•	1	50	3	0 0
do do do do do James Edmonds 6 do 1 50 10 10 10 10 10 10	do do do do James Edmonds 6 do 1 50 10	do	do	. do		. Benj. R	edfern		. 23	do					
do do do do Geo. Thompson 13 do 1 50 19 do do Geo. A. Upper 8 do 1 50 12 do do do do R. Stevenson 14 do 1 50 12 do do do do Alfred Upper 7 do 1 50 10 do do do Dan. Kelly, team 7 do 3 50 31 do do do do do do do d	do do do do Geo. Thompson 13 do 1 50 19 do do do Geo. A. Upper 8 do 1 50 12 do do do do R. Stevenson 14 do 1 50 10 do do do do Alfred Upper 7 do 1 50 10 do do do Dan. Kelly, team 9 do 3 50 31 Division No. 4. Caking off old decayed sheeting, Harbor Master's House, and putting on new; tightening up windows, and general repairs do do do Jacob Cook 13 do 1 50 19 do do do do Jacob Cook 13 do 1 50 19 do do do do Jacob Cook 13 do 1 50 19 do do do do do Wm. Deeks 5½ do 1 50 19 do do do A. Gilchrist 1 do 2 00 2 do do Sam. Cook, team 8½ do 3 50 28 Inspector of piles, Port Dalhousie dan H. Vanderburgh 1 month 75 75 do pattern house, Lock 13 do Jio McMillan 15 15 15 15 do Days 1 50 45 do Jio McMillan 15 15 15 15 do Jio McMillan 15 15 15 do Jio McMillan 15 15 15 do Jio McMillan 15 15 15 do Jio McMillan 15 15 15 do Jio McMillan 15 15 do Jio McMillan 15 15 do Jio McMillan Jio McMillan 15 do Jio McMillan Jio McMillan 15 do Jio McMillan Jio McMillan Jio McMillan 15 do Jio McMillan Jio McMillan 15 do Jio McMillan Jio McMillan 15 do Jio McMillan Jio McMillan 15 do Jio McMillan Jio McMillan 15 do	do	do		• •	. Geo. P.	. Мівце	ar	. 7						7 . 2
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do do do do Alfred Upper 7 do 1 50 10 do do do Dan. Kelly, team 7 do 3 50 31	do do do do Alfred Upper 7 do 1 50 10 do do do do Dan. Kelly, team 5 do 3 50 Division No. 4.		do	. ao											
do do do do Dan. Kelly, team. 7 do 1 50 31	do do do do Dan. Kelly, team. 7 do 1 50 31 Division No. 4. Caking off old decayed sheeting, Harbor Master's House, and putting on new; tightening up windows, and general repairs do do do do Jacob Cook 17 do 2 00 34 do do do do Jacob Cook 13 do 1 50 19 do do do do do do do	_			•	. Geo. A	. Uppe	r	-1.8						
Dan. Kelly, team	Division No. 4. Dan. Kelly, team		3	1 4 4	•	. R. Stev	enson.		14						
Division No. 4. Caking off old decayed sheeting, Harbor Master's House, and putting on new; tightening up windows, and general repairs do	Division No. 4. Caking off old decayed sheeting, Harbor Master's House, and putting on new; tightening up windows, and general repairs do		3.												
Caking off old decayed sheeting, Harbor Master's House, and putting on new; tightening up windows, and general repairs. do Wm Cook	Caking off old decayed sheeting, Harbor Master's House, and putting on new; tightening up windows, and general repairs do Jacob Cook				•	. Lau. V.	dr. 1.	Hahri	رد ا.	uo	•*•	'	-3 TM,	ľ	- '
Harbor Master's House, and putting on new; tightening up windows, and general repairs do	Harbor Master's House, and putting on new; tightening up windows, and general repairs do			_					1						
putting on new; tightening up windows, and general repairs do Wm Cook	putting on new; tightening up windows, and general repairs do Wm. Gook	Harbor Maste	ecayed sheetinger's House, an	3		1	,		1						
windows, and general repairs do do Wm. Gook	windows, and general repairs do do do do do do do do do do do do do	putting on ne	w: tightening u	0		ì			1]	1	'	
do do do do do do 1 50 150	do do do do Jacob Cook 15 do 150 150 150 do do do do Wm. Deeks 5½ do 150 6 6 6 6 6 6 6 6 6	windows, and	general repairs.	. do		$$ $\mathbf{W}_{\mathbf{m}}$ \mathbf{C}	ook		.]17	do	•••	1 :	2 00	1 3	34 (
do do J. Moyer 1 do 1 50 1 do 1 50 1 do 1 50 1 50 1 50 1 50 8 do 1 50 8 do 1 50 8 do 1 50 8 do 1 50 8 do 1 50 8 do 1 50 8 do 1 50 8 do 1 50 8 do 1 50 8 do 1 50 8 do 2 do <td< td=""><td>do do J. Moyer</td><td>do</td><td>do .</td><td> ao</td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>]</td><td></td></td<>	do do J. Moyer	do	do .	ao	•]	
do do do E. Bonaberg. 4 do 1 50 6 6	do do do E. Bonaberg. 4 do 1 50 6	do				J. Moy	er	••••••	. 1	do	•••	1		l	1 !
Caulking tool scow	Caulking tool scow do A. Gilchrist 1 do 2 00 2 2 00 do Sam. Cook, team 8½ do 3 50 28 Inspector of piles, Port Dalhousie dam do H. Vanderburgh 1 month 75 00 75 Watchman, Port Dalhousie shop. do Oscar Sharp 30 days 1 50 45 do pattern house, Lock 13 do Jno. McMillan 15 do 1 20 18								. 5	do.	•••	1.		1	8 3
Column	Manual M	do .	do .		•	"F. Ron	aperg.		4	ďo				i	
Column	Column C	∪anlking tool s	cow	1 1.										į,	
Watchman, Port Dalhousie shop. do OScar Sharp. 30 days. 1 50 45 do. pattern house, Lock 13 do Jno. McMillan. 15 do 1 20 18	watchman, Port Dalhousie shop. do Oscar Sharp. 20 days. 1 50 45 do Dattern house, Lock 13 do Jno. McMillan. 15 do 1 20 18	do	*************		•	jsam. U	OOK, T	eam	8	4 ao	•••	1	J 50	1	48
watchman, Port Dalhousie shop do Oscar Sharp	do. pattern house, Lock 13 do Jno. McMillan 150 45 18 10	uspector of pile	es, Port Dalhous	10		H Ve-	dorbe	nah	1		4 h	١ ,	K 00	. ,	75
do. pattern house, Lock 13 do Jno. McMillan 15 do 1 20 18	do. pattern house, Lock 13 do Jno. McMillan 15 do 1 20	Watchman D		do		Ogoba S	iuerou.	rgu	;; <mark>2</mark>	mon	LD	1 '			
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To to in the interest of the i					•	Henry	Hugh	id	10						
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Accounts chargeable to Welland Canal, Renewals and Repairs.

D	ate.	Nature of Work.	Amount.	Total.
1:	887.	To Cov Brog St Cathering	\$ cts.	\$ cts.
A pril	1-30	To Coy Bros., St. Catharines— 1 dozen bolts, \$1; 100 lbs. wrought spike, at 5c., \$5 5½ gallons lard oil, at \$1, \$5.50; 1 oil can, 25c	6 00 5 75	
		11 lbs. sulphur, 55c	120 2 5	190 KP
do	1–30	James Wilson, Thorold— 11 lbs. manilla rope, 12½c 18 steel spades, \$1.25	1 38 22 50	132 55
do	1-30	Henry Mussen, Allanburgh— 70 lbs. manilla rope, at 15c., \$10.50; 19 lbs. spike, at	11 45	23 88
		8 gallons coal oil, at 30c., \$2.40; 1 broom, 35c	11 45 2 75 24	
do	1-30	Chatfield & Neelon, St. Catharines—4 round copper plates.		14 44 6 50
do	1-30	R. A. Abbey, Port Robinson— 3 boxes axle grease, at 15c., 45c.; 3 dozen bolts, at 50c., \$1.50	1 95	
		3 gross screws, at 40c., \$1.20; 2 pails, 50c.; 9 chimneys, at 10c., 90c.	2 60	
		1 lamp, 85c.; 2 paint brushes, at 30c., 60c.; 2 brooms, at 25c., 50c	1 95	
		10c., \$1.50	3 30	
		table dish, 80c** *422 lbs. meat, at 10c., \$4.27; 25 lbs. flour, 50c.; 29 loaves bread, at 6c., \$1.74	3 00	
		*9 dozen eggs, at 12c., \$1.08; 1 bushel turnips, 40c.; 16	6 51	
		bs. sugar, \$1	2 48	
•		lons soal oil, 50c	1 58 6 7 5	30 12
		*Meals, &c., for men working at Port Robinson bridge while away from home.		30 13
ďo	1-30	J. Bradfield, Port Robinson— 104 lbs. beef, at 121c., \$1.35; 294 lbs. beef, at 10c., \$2.97.	4 32	
		1141 lbs. shoulder, at 13c., \$14.89; 1251 lbs. ham, at 15c., \$18.79	3 3 68	
		potatoes, 20c	1 62	39 62
		Above for meals for men working at Port Robinson bridge while away from home.		30 32
- do	1–30	Wm. N. Garden, Welland— 4 pad locks, at 25c., \$1; 60 lbs. wrought spike, at 5c.,		
		\$3	4 00	
		at 14c., \$4.34	10 34 5 30	
		2 files	20	19 84
A nei	l 1_20	John Mathews, Port Colborne— 10 paint brushes, \$6.85; 50 lbs. wire nails, at 6c., \$3; 6		
-er br.r.	l 1–30	padlocks, 80c	10 65	
		9½ prs. butts, at 8c., 76c	10 66	
		80c., \$14.40	15 05	

ACCOUNTS chargeable to Welland Canal, Renewals and Repairs-Continued.

Date.	Nature of Work.	Amount.	Total.
		\$ cts.	\$ cts.
April 1-30	To John Matthews, Port Colborne— 2 gall, japan, 75c.; 18 lbs. yellow ochre, at 5c., 90c.; 342 lbs. putty, at 4c., \$1.38	3 03 14 00	
	agall. knotting, at \$3, 75c.; 175 lbs. white lead, at 7c.,	13 00	
	\$12.25. 1 gall. turpentine, \$1; brads, 38c.; ½ lb. blue, 20c.; 12½ lbs. black lead, at 8c., \$1	2 53	
	Samuel Burrows, Port Colborne-		68 92
do 1–30	12 ft. waste pipe and time, \$2.25; repairing trough, \$1.80 11 lbs. zinc, at 10c., \$1.10; repairing lamps and pumps,	4 05	
	80c	1 90	5 95
do 1-30	512 do \$32, \$16.38; 41 do \$35, \$1.44 2,000 ft. oak plank, at \$25	80 60 17 82 50 00	
	78 ft. corner board, at 4c., \$3.12; 55 ft. water table, at 4c., \$2.20	5 32	
	30 ft. round, at 1c., 30c.; 52 ft. crown mould, at 4c., \$2.08 2 bunches lath, at 15c.	2 38 0 30	
	4,800 ft. oak piles, at 15c.	720 00	070.40
	James Wilson, Merritton-		876 42
do 1–30	Foundry work— 1,535 lbs. castings, at 3½c	53 73	
	59½ lbs. steeling pick bars, &c., at 20c	11 90 52 60	
do 1–30	Blacksmith work—	278 50	
	6c., \$1.20	12 45 72 88	
			482 06
do 30	Campbell Sewer Pipe Co., Hamilton— 200 ft. 6-in. pipe, at 20c	40 00 12 50 0.80	
	50	53 30	
	50 per cent	26 65	26 65
do 1-30 do 1 30	days, at \$2.50	20 00 3 50 32 50	
	after repairs	1 50	ED EV
Apr. 1-30	Henry Vanderburgh, Allanburgh—25 railway fares to Port		57 50
Apr. 1-30.			17 50 99 00
Apr. 30.	proof roofing and putting same on, \$6		19 20
Apr. 12.	Windeyer and Falloon, Toronto— Railway fare from Port Colborne	4 80	
r	Hotel expenses, \$4; hack fare, 30c	4 30	
	office, Port Colborne		b
Apr. 1-30.			74 10
	home on repairs, at 25c		7 75

Accounts chargeable to Welland Canal, Renewals and Repairs-Continued.

Da	te.	Nature of Work.	Amount.	Total.
188	37.		\$ cts.	\$ cts
lpr. 1	1-30	F. T. Walton, Thorold— 11 railway fares to Port Robinson, 35c	3 85 2 20 1 05	7 10
lar.	24	John Date, Montreal— Repairing and altering diver's air engine, fixing new brass cylinder, valves and connecting pipe, new foundation plate, &e., 3 brass cylinders, \$18; 1 brass cattlepiece, \$1.50	19 50	. 10
Apr.	4	plate, \$5.75	10 25 0 50 31 00 12 00	
_		3 feet snap tubing, at 75c.; 6 rubber rings, \$1.56	3 75	77 00
f a r. April	28 30	John Shickluna, St. Catharines—Horse and buggy W. F. Detroling, Port Colborne—16,000 red brick, de- livered, at \$7		1 50 112 00
do	30	George Foreman, Port Colborne—10 cords building stone, delivered, at \$3.50.		35 00
do	30	Tug "Maggie," Port Colborne—Services to Thorold and		20 00
do	30	Grand Trunk Railway Co., D. Hughes, Agent, Port Colborne—Freight, 150 pieces sewer pipe from Hamilton		8 07
		Old Welland and Feeder Canal.		
đo :	1–30	Goy Bros, St. Catharines— 6 bales oakum, at \$5, \$30; 1½ doz. files, at \$3, \$4.50 560 lbs. spike, at \$5, \$28; 6 craking hammers, at 60c.,	34 50	
		\$3.60. 8 handles, at 20c., \$1.60; 3 augers, \$5.25; 41 lbs. red lead; at 10c., \$4.10.	31 60	
	j	2 galls raw oil, at 70c., \$1.40; 25 lbs. white lead, at 8c., \$2; 35 lbs. nails, at 4c., \$1.40	10 95 4 80	
		18 108. manilla rope, at 15c, \$11.70; \$ bbl. pitch, \$3; 1 sheepskin, \$1.50	16 20	
		2 galls. boiled oil, at 75c., \$1.50; 2 paint brushes, \$2; 12 lbs. brimstone; at 5c.,60c	4 10	
		\$1.25; 2 steel tapes, \$2.60	6 35 17 64	100 14
do ,∃	1–30	James Wilson, Thorold— 86 lbs. nails, at 4c., \$3.44; 325 lbs. white lead, at 7c., \$22.75; 15 lbs. paint, at 15c., \$2.25	28 44	126 14
		1 pick, \$1; 10 handles, at 25c., \$2.50; 8 shovels, at \$1.25, \$14; 1 gall. 1aw oil, 80c	14 30	
		\$1, \$20; 34 lbs. putty, at 5c., \$1.70	24 20	
		122c., 63c.; 2 forks, \$3	10 23	
		at 4½c., \$9.13	12 13	
	1	at 8c., \$6.52 3 mauls, at \$1.50	9 90 4 5 0	

Accounts chargeable to Welland Canal, Renewals and Repairs-Continued.

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts.
A pril 1−30	James Rolston, Dunnville— 1 shieve, \$1.35; 12½ lbs. red lead, at 8c., \$1; ½ gall. turpentine, 50c	2 85 3 10 3 32	
do 1-30	McCleary & McLean, Thorold— 27,962 feet pine, at \$16, \$447.40; 3,513 feet pine, at \$17, \$59.72 1,000 feet pine 903 feet oak, at \$25, \$32 57; 6,530 feet oak, at \$27, \$176.31 2,290 feet oak, at \$28, \$64.12; 320 feet oak, \$40, \$12.80 feet oak, at \$28, \$64.12; 320 feet oak, \$40, \$12.80 feet oak, \$40, \$40.80 feet oak, \$40, \$40.80 feet oak, \$40, \$40.80 feet oak, \$40, \$40.80 feet oak, \$40,	507 12 18 00	9 27
	2,634 feet pine, at \$16, \$42.15; 1,260 feet pine, at \$17, \$21.42 4,043 feet oak, at 25c	63 57 101 0 7 5 80	1 142 08
Nov., 1886. April 8. do 1-30.	Boating and delivering dimension stone from quarry to St. Paul Street bridge, 95 yards, at 90c	85 50 366 00	1,143 06
do 1–30.	and unloading and trimming same along banks of Feeder where washed out, 1,998 yards, at \$1.16 Welland Vale Manufacturing Co., St. Catharines—	2,197 80	2,649 30
	7 hooks, at 75e, \$5.25; 2 mortar hoes, at 60c., \$1.20 3 manure forks, at 75c., \$2.25; 2 scoops, at \$1.25, \$2.50. 3 hours work for machinist, and tools, at 40c	6 45 4 75 1 20	12 40
do 1-30.	Dobbie & Stewart, Thorold— 211 lbs. bolts, 13 x 1 in., at 3 c	2 25 4 50	
' do 1-3 0	James Wilson, Merritton (blacksmithing)— 882 lbs. bolts repaired, at 2½c., \$22.05; 72 lbs. rag spikes at 3c., \$2.16	24 21 23 16	15 86
do 2 9			137 3: 8 4
do 1- 30	James Wilson, Merritton— 1,264 lbs. castings, at 3½c	5 80	
de 1-30			84 5
do 1- 30	to Allanburgh after repairs, scow, &c	n	6 0 8 5
4	209		

Accounts chargeable to Welland Canal, Renewals and Repairs-Continued.

Date.	Nature of Work.	Amo ui	at.	Total.
1887.	mi a di mi a d	\$	cts.	\$ cts
April 1-30 do 1-30	Thomas Grenville, Thorold, 40 days men and self painting Marlatts' Bridge and approaches, &c., at \$2 Thomas Hastings, contractor, St. Catharines— Building cut stone abutments for St. Paul Street Bridge, north end, and furnishing material, 122½ yds., at \$10 Building rubble wing walls, in cement, for St. Paul Street Bridge, 44 yds., at \$3 Building 2 rubble bridge abutments, in cement, at Martindale Creek near Port Dalhousie, 25½ yds., at \$3		33 00	80 00
Jan. 17 April 30	Cr. By cash on account stone delivered	1,491 398		1,092 67 7,739 83

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of May, 1887, to pay Carpenters, Laborers, Teams and Accounts, chargeable to Renewals and Repairs.

Capacity.		Employ			Nam	es.		T	ime.		Rate	е.	Amou	nt	•
Compostore	94-		<u> </u>								\$	cts.	\$	C	ts.
 Carpenters, repairing bridges and lock g 	noats ates. Ob	 }								- 1					
Canal; repairing brid				1						1		i			
Canal and lock gates	. assortin	g		J.,		_				- 1			_		
timber for new shed,			887.	H. Va	nderb	urgi	1	l m				00			00
do do do do	••	1 3 -	•••	Vm Wm	Mossi	son		33 7	days			00			00 00
do do	••	1 3.	•••	Samu	el Ho	istor	1	5	do do			00			00
do do	••	۸.	•••	Alf.	Coons			26	do			00			00
Watchman, Port Dalho	usie shop			_							_				
Watchman, Pattern Ho	use, Loc	· do	•••	1		-		l	do		1	50	4	6	5 0
13	•••••••	· do	•••	John	McMil	lan		31	do		1	20	3	7	20
Repairing banks and				ļ				ļ		ļ					
new snub posts; of				ł						- 1					
and cleaning out dito ing box pipe on lo	ng level] '								- 1			1		
also, renewing snu	b posts	١, ١		ĺ						- 1			1		
Locks 5, 2, 9 and Bri							man		do			00			50
do d o		. do					••••••		ďο			. 50			63
do do		do					•••		do		-	. 50 . 5 0			63 88
do do		. do					·		do			50			38
do de		do							do		_	50			63
do de		. do	•••	Geo.	Daley			134	do		1	50	2	0	63
do de		do							₫o			. 50			00
do do	_	·· do	•••				•		do			50			50
do do		do							do	:::		. 5 0			50 50
do de		do					team					50			50
Excavating and wide	ening an	d				,				"				_	
water from Marr's P				Geo.	A. Jo	rdor	1	26	dav	g	1	00	5	2	00
do de		do					••••••					50			13
do d		do							do			L 50			88
do d		do					• • • • • • • • • • • • • • • • • • • •			•••		L 50			50
do d	_	do					n			•••		L 50 L 50			88 13
do d	^	do										1 50			25
do d		do	••	. W. J	Abb	ey	••• <u>-</u> •••	13				1 50			50
do d		do	••	. A M	cIntos	ıh, V	v. B	163	do	•••		75			56
do d	ο ,	do	••	.Dan.	Kelly	, te	am	234	do	•••	1 3	3 50	1 8	31	37
Opening up and cleari and repairing banks, south of Welland, al out Welland and	north an so clearin Junctio	d g													
Locks		do		Jas.	Clance	y, fo	reman	26		•••		2 00			00
do		do					•••••			•••		1 50 1 50	1		00
do do		do	••	Thos	เพื่อไ	ane. dron	•	26		•••		1 50			25 00
do	.1	do	••	Geo.	Nola	1	••••••	26		•••		1 50			00
do	do .	do	••	. Wm.	. Pew.		••••	26	do	•••		1 50		39	00
do	do	do	••	. Alph	. Han	nah,	team.	1	d c	• •••	١ :	3 50	1	3	50
Sharpening and driving	g piles f	or		117	m;1:	n e	0 20 22 0 -				1	0 05		Ke.	01
tug docks at Port Co	4.0	1 40					oreman			•••		2 25 2 00			81 00
do do	4.	do					• • • • • • • • • •			• • • • • • • • • • • • • • • • • • • •		2 00			00
do	4.	do					•••••			·		1 50			00
d o	4.	do		. Johr	Sutte	m	••••	. 23			l l	1 50	1 :	35	63
do	do	do					ws					1 50			00
do do		do	•	John	. Brad	ıеу	••••••	. 8)),		1 50 1 50			00 63
	do	ı ao													11.4

PAY-LIST in duplicate of persons employed on the Welland Canal, &c.—Continued.

Division No. 4. Repairing Harbor Master's house, also Lock and Bridges, &c		•		Ī					-		===
Division No. 4. Repairing Harbor Master's house, also Lock and Bridges, &c do	Capacity	7.	When Employe		Names.	7	ime.	Rate.		Amou	nt.
### Also Lock and Bridges, &c	Division N	· · · · · · ·						\$ c1	.s.	\$	cts
Excavating for and setting new snub posts; repairing floats, towpaths and opening up and cleaning out back ditches; putting culvert and new towpath Ramey's Bend, and helping to unload building stone, &c	also Lock and Bri	dges, &c	May, 188	37.	Wm. Cook Jacob Cook	26 26					00
No. Morey, foreman 283 do 2 00 30 30 30 30 30 30	Excavating for and snub posts; repa towpaths and op- cleaning out be putting culvert a path Ramey's Ber	airing floats ening up and ack ditches and new tow ad, and help									
do do do do do do do do	&c		do								00
do do do do do do do do			1 40								00
do do do do do M. Anthes		4.	1 30	•••	F. Moyer	24	do	1 5	0 [36	00
N. Morey, foreman	do	do	. do	•••	E. Sloat	25					50
do do do do do do do do		a.	1 4								5 00 5 00
Co do do do do do do do		.a	مة ا		J. Mehagan	25					7 50
Sam Cook, team					G. Petey	25					7 50
OLD WELLAND CANAL AND FEEDER. Carpenters taking down temporary bridge across canal alongside St. Paul Street permanent Bridge; taking out and putting up new foot bridge across roadway, sail maker premises, &c., &c				•••	Sam Cook, team	184					87
Carpenters taking down temporary bridge across canal alongside St. Paul Street permanent Bridge; taking out and putting up new foot bridge across roadway, sail maker premises, &c., &c			1	•••	n. Cook and norse	1 4	uo	20	۱ ۳		1 00
porary bridge across canal alongside St. Paul Street permanent Bridge; taking out and putting up new foot bridge across roadway, sail maker premises, &c., &c	OLD WELLAND CANA	l and Feeder	1								
do do do do do do do S. Radcliffe	porary bridge a alongside St. Pau manent Bridge; to putting up new across roadway,	across cana al Street per aking out and foot bridg sail make			N. Morey, foreman	283	do	2 7	5	. 7:	9 06
Naking approach to bridge across Marr's & Pond Creeks; unloading scow with stone and gravel; putting down stone crossing St. Paul Street Bridge, &c., &c do			40	•••	P. Shortell	27	do				5 50
Making approach to bridge across Marr's & Pond Creeks; unloading scow with stone and gravel; putting down stone crossing St. Paul Street Bridge, &c., &c do do do do John Weaver 23 do 1 50 34 do 273 do 1 60 31 do John Weaver 23 do 1 50 34 do John Weaver 23 do 1 50 34 do John Hemphill 21 do 1 50 36 do do do John Hemphill 21 do 1 50 36 do do Wm. Chandler 221 do 1 50 38 do do Wm. Chandler 222 do 1 50 38 do do Wm. Chandler 223 do 1 50 36 do do Wm. Chandler 224 do 1 50 38 do do Wm. Chandler 225 do 1 50 32		do	. do	•••	S. Radcliffe	$ 28\frac{3}{4}$	do				7 50
According to the content of the co				•••	T. Rapsey	$ 28_{\frac{1}{4}}$	do				5 50 3 50
Making approach to bridge across Marr's & Pond Creeks; unloading scow with stone and gravel; putting down stone crossing St. Paul Street Bridge, &c., &c do		4.	- 40		Robert Wilson	273	do				1 63
Making approach to bridge across Marr's & Pond Creeks; unloading scow with stone and gravel; putting down stone crossing St. Paul Street Bridge, &c., &c do		4.0	40								7 12
Paul Street Bridge, &c., &c do do do do do do	Making approach to Marr's & Pond Cr ing scow with stor	bridge acros eeks; unload ne and gravel	8 - ;	•••	J. Boyle, watchman.	. 31	do	1 (00	3	1 00
do do do John Weaver	putting down stol	ne &c&c	do do	•••	T. O'Neil, foreman	. 284	do	2 (0	. 5	7 00
do do do Jas. Boyle		do .	. do	•••	John Weaver	. 23					4 50
do do do Wm. Chandler	do	_		•••							6 00
do do do Richard Grant		3 -	۸۵ ا	•••	307 (11						2 25 8 75
do do do Wm. Assell 15½ do 1 25 19 Quarrying out stone, also loading and unloading scow with same. do Jas. Hamilton, for n 26 do 2 00 52		4.	40							_	8 00
and unloading scow with same. do Jas. Hamilton, for n 26 do 200 52		ے د	1 40					1 2	25	1	9 37
and uniousing soon with pumor					Ton Hamilton for	20	do	9 4	, l		2 00
	and unioading sco	4.	- 40				do				6 00
do do do Jas. Faywell 251 do 1 59 38		dο	40	•••	Jas. Faywell	. 25	do	1 !	5 0	3	8 25
do do do Abr. Bradley	фo	do .	. do		Abr. Bradley	. 24	do				6 75
		3.	1 4 -	• • •	C Dennis	201	do				8 25 8 25
40		4.	1 4		Wm. Winslow	17	do		1		5 50
do do do Jno. Dundas 15 do 1 50 22							do	1 8	50	2	2 50
do do do M. Nester do 1 50 0	фo	do	. do	•••	M. Nester	.	do				0 75
			1 40			•	αο				0 75 0 75
do do do A. W. Bradley \frac{1}{2} \text{do} 1 50 0 do do C. Tenbrook, team 25 \text{do} \text{do} 3 50 87			1 4	•••	C. Tenbrook, team	$ _{25}^{2}$					7 50
212	wv			•••		.,		- '	-	·	

PAY-LIST in duplicate of persons employed on the Welland Canal, &c. -Continued.

Сара	city.		Whe Emplo		Names.	Т	ime.	Rate.	Amount.
						_		\$ cts.	\$ ct
General repairs;	also facing	canai		200	4 41 There 41		,	7 70	45.00
Danks with stor		••••••			Arthur Bradley	30		1 50	45 00
do do	do do	. * * *	do do	• •••	Pat. Griffin		do	1 50 1 50	42 00 36 75
do	do	•••	do		Robt. Pews		do	1 50	37 50
do	do	•••	do	•••	Wm. Clarke	241	do	1 50	36 75
do	do	•••	do	•••	Richard Dawson	5	do	1 40	7 50
Putting new fo		nnder	-	•••		١		- 10	1
winches Locks	20 and 22 :	put-				l .			
ting new railin			l				1		l
andworking on			1			1	1		1 .
bridge 15; repa	airing lock	gates	ŀ			ļ	1		l
and winches f	rom locks	12 to	1			1			ł
25; repairing p	ivot suppo	orung	ļ			l	- 1		l
bridge, and	rebuilding	10CK	١.,		7				
gates, &c		••••••	do	•••	F. T. Walton	16	do	2 75	44 00
do do	do do	. •••	do	•••	S. R. Bradley	20	do	2 00	50 00
	_	•••	do		D. S. Walton		do	2 00	52 00
do do	do . do	•••	do do		Wm. Dunn		do	2 00 2 00	54.00 50.00
do	do	•••	do		Ed. Smith Benj. Baker		do	2 00	12 00
do	do	•••	do		R. Jackson		do	2 00	12 00
do	do	•••	do		S. J. Hill	71	do	2 00	14 50
do	do	•••	do	••••	Wm. Abbey	6	do	1 75	10 50
do	do	•••	do		F. Sherman	26	do	î 75	45 50
do	do		do		Geo B. Jordon	6	do	1 50	9 00
do	do		do		Adam Brown	31	do	2 00	6 50
do	do		do		Wm. Klock	1	do	1 75	0 88
do	do	•••	do		F. T. Walton, H. & W	4	do	1 50	6 00
Attending locks,				- 1		ĺ	- 1		
night and day,			_	- [.		
stone, &c			qo	••••	Andrew Clark		do	1 50	29 25
do	do	. •••	do	••••	Wm. Gibson	20	do	1 50	30 00
do	do	••••	do	•••	Jas. Reynard, jun	20	do	1 50	30 00
do do	do	•••	do		Wm. Horton		do	1 50	28 50
do	do	•••	do do	•••	Geo. Wilson	19	do	1 50 1 50	28 50 30 00
do	do do	•••	do	•••	Geo. Boyle	11	do	1 50	2 25
do	do	••••	d o	•••	Alex. Winslow	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	do	1 50	2 25
do	do	• • •	do	***	John Fenney	12	do	1 50	1 50
do	do	•••	do		Rufus Swazzie	5	do	1 50	7 50
do	do		do		Jno. Sullivan		do	1 50	i 50
do	do		do		T. Johnson	ī	do	1 50	1 50
Feeder L	ivision.								,
epairing bridge					T 73.3	_	1.	1 50	0.00
and wheelbarro			do		James Edgar		do	1 50 1 50	9 00
do do	do	•••	do		R. Mitchell		do	1 50	9 00 9 75
do	d o do	• • •	do do		Nelson Banks		do	1 50	14 25
do	do	•••	do	•••	David Cooper Geo. Killins		do	1 50	18 00
ainting canal		ctor's	40				'''	~ 00	1000
office			do		T. C. Tipton	23	do	1 50	34 50
Repairing banks						1			1
and cleaning of			do		John Trush	6	do	1 50	9 00
do	do		do		Ira Bessey	5	do	1 25	6 25
do	do		do		E. Webber	6	do	1 25	7 50
do	do		do	•••	Jno. Broham	17	do	1 25	21 25
₫o	do		d o		Thos. Bessey	2	do	1 25	2 50
do	d o		do	•••	R. G. Murdy, team	8	do	2 56	20 00
		ł					- 1		
									4,069 43

Accounts chargeable to Welland Canal, Renewals and Repairs.

Da	ate.	Nature of Work.	Amount.	Total.
18	87.		\$ cts.	\$ cts.
_		To Coy Bros., St. Catharines-	ï l	
May	1-31	25 diamond wrenches, \$1.50	37 50	
	1	25 pipe do \$2.75	68 75 44 00	
		22 screw do \$2.00	1 61	
	1	12 lbs. rod iron, 48c.; 672 lbs. spike, at 5c., \$33.60	34 08	
	Į.	4 keg nails, at \$3.50, \$ 4; 2 lbs. castile soap, 60c	14 60	
	•	1 gallon castor oil, \$1.40; 1 gallon black Japan, \$1.10 137 lbs. tellow, at 9c., \$12.33; 2 lbs. Indian red, at 25c.,	2 50 12 83	
		1 empty case, 25c.; 6 axes and bandles, at \$1.25, \$7.50	7 75	
	-	16 hand hammers, 80c	12 80	
		4041 lbs. ratline, 15c	€0 68	
		T 177'1 (m)		297 10
do	1-31	James Wilson, Thorold—	55 95	
uo,	1-01	1,210 spikes, at 4½c, \$54.45; 2 pad locks, \$1.50	90	
		22 1331 2433, 40 1201, 000		56 8 5
•		Henry Mussen, Allanburgh-	1	
фo	1-31	5 oilers, at 15c., 75c.; 7 gallons coal oil, at 30c., \$2.10;	3 60	
		l lock, 75	3 00	
		22c.: wick. 35c	1 67	
		11 rolls wall paper, at 15c., \$1.65; 261 rolls border, at		
		4c., \$1.06	2 71	# 00
		R. A. Abbey, Port Robinson—		7 98
đo	1-31			
		10c., \$1.30	5 80	
		12 gallons coal oil, at 30c., \$3.60; I gallon machine oil,		
		75c.; 1 paint brush, 25c	4 60	
		*10 loaves bread. at 6c., 60c.; 16 lbs. sugar, \$1; 6 lbs. tea, at 40c., \$2.40; 7 lbs. oatmeal, 25c	4 25	
		*5 dozen eggs, 63c.; 1 pail, 60c.; 3 lbs. lard, at 14c., 42c.	1	
		chimneys, \$1	2 65	
		*6 lbs. butter, 23c., \$1.38; soap, 25c	1 63	18 93
		*Supplies for men on Government scow away from home.		10 33
do	1-31	The second of th	i	
		lbs nails, at 5c., 75		1 95
đo	1-31	T. Cummings, Welland—		
uo	7-011	100 lbs. whitelead, \$8; 12 gallons boiled oil, at 80c. \$9.60; 20 lbs. putty, at 4½c., 90c	18 50	
		1 gallon turpentine, \$1.10; 1 gallon Japan, \$1.10; 28		
		lbs. mixed paint, 4c., \$1.14	.) 334	
		3 paint brushes, at 60c., \$1.80; 3 kegs C. P. lead, a	ון ס מב	İ
		\$2.10, \$6; putty knife, \$1.25		1
				30746
		George Lloyd, St. Catharines-		
do	1–31.	rampt, ar over, 42 , oo oners, ar over, 4 rentered		1
		3 oilers with long spouts, at 60c	. 18 00	35 00
		Richard House, St. Catharines-	1	
do	1-31.	•• 82 galv. pipe, at 20c., \$1.70; repairing oil cans, 90c	. 2 60	Į
		Repairing bells at office, \$1.50; 23 lbs. solder, \$1.15;	2	Ì
		elbows, at 50c., \$1	3 65	1
		1 dozen hooks, \$1.50; 1 sheet tin, 10c.; 1 gas cock an key, \$2	3 60	1
		25 oil cans, at 25c		i
		60 feet extra galvanized pipe, 30c	18 00	
		11 $\frac{1}{2}$ hours labor, at 25c, \$2.88; 2 hours helper, at 15c	.,	1
•		28 hours man and holper some office 271a	3 18 10 50	
		28 hours man and helper, canal office, 37½c	"	47.78
		214	•	
		- 		

Accounts chargeable to Welland Canal, Renewals and Repairs-Continued.

				
. D a	ate.	Nature of Work.	Amount.	Total.
.18	387.		\$ cts.	\$ cts.
do	1-31	To John Mathews, Port Colborne— 2 paint brushes, at 80c., \$1.60; 1½ lbs. blue, at 40c., 60c.; 50 lbs. black lead, at 6c, \$3 25 lbs. white lead, at 7c., \$1.75; 6 gallons boiled oil, at 80c., \$4.80; 1 pint Japan, 38 30 lbs. Venetian red, at 5c., \$1.50; 1½ gallon turpentine, at 80c., \$1.20; 16 lbs. putty, at 4c., 64c 173 lbs. spike, at 5c., \$8.65; 45 lbs. wire nails, at 6c., \$2.70; ½ dozen shovels, \$5.25 28 lbs. yellow ochre. at 5c., \$1.40; 26½ lbs. manilla rope, at \$12½c., \$3.31; 10 lights glass, 70c 2 lbs. marline, at 17c, 34c.; 1 bale oakum, \$4.50; 9 files, at 12c., \$1.08; bulls, 38c 100 lbs. shingle nails, \$5; 300 lbs. nails, at 4c., \$12; 2 packages cut nails, 38c 3 13-feet oars, \$4.88; 5 gross assorted screws, \$2.03; 2 dozen hooks, \$1.	5 20 6 93 3 34 16 60 5 41 6 30 17 38 7 91 30	
do	1–31	Sam. Burrows, Port Colborne— 8½ lbs. line, at 10c., 85c.; 25 feet galvanized trough, at 15c., \$3.75	4 60 2 90	69 3 7 .
May do	11 20	Gordon & McKay, Merritton—1 sack waste, 50 lbs., at 91c Arch. McIndoe, Thorold—Repairing 2 double 6 in. blocks for iron strap		4 75 5 25
đo do	31 31	W. F. Detroling, Port Colborne—14,000 red brick, at \$7 George Freeman, Port Colborne—25 cords building stones,		98 90 100 0 0
go	31	Murray & Cleveland, St. Catharines—10 cords building stone, at \$4		40 00
do	25 1–31	W. H. Rooth, Port Colborne—Painting Harbor Master's house, and furnishing material, Port Colborne	183 30	8 5 0
do	6-7	F. H. Becker, Thorold—16 meals, at 25c., \$4; 5 feeds for		185 92
Apri	1 1–30	teams, at 50c., \$2.50	5 25	6 50· 21 00·
May	1-31	Thos. O'Neil, Port Colborne—319 meals for men on pile driver away from home, at 25c		79 75
đo	31	Dickinson & Sness, Humberstone—Advance on account of construction of Canal Toll Collectors' and Customs		1,000 00
do	1-31	House, Port Colborne, as per agreement	239 71 26 16	265 [8 7
đe	1-31	James Wilson, Merritton— Blacksmithing— 1,881 lbs. S. bolts, rep., at 2½c., \$47 03; 30 lbs. rag spikes, at 3c., 90c.; 1 double block, \$5	52 93	200,20\$

Accounts chargeable to Welland Canal-Renewals and Repairs-Continued.

Date.	Nature of Work.	Amount.	Total.	
1887.		\$ cts.	\$ cts	
Ma 1 01	To James Wilson, Merritton-			
May 1-31	Foundry work— 1,136 lbs. castings, at 3½c., \$39.76; 84 lbs. screws, at 5c., \$4.20; 29 lbs. steel, at 20c., \$5.80	49 76 6 60 90 80	281 06	
May 1-31	J. G. Demare, Port Dalhousie— Express charges on diver's pump, shoes, &c., from Mon-	1	202 00	
	treal. 2 railway fares, Allanburgh. 2 do Port Colborne	8 05 1 20 2 50 0 75 0 30 3 05 0 35 0 35		
	do do from Welland	1 12	1 P A P	
May 12 May 1-31	John Shickluna, St. Catharines, horse and buggy		17 67 1 50	
	days, at \$2.50	27 50 42 50		
ur. 1 01		3 00	73 00	
May 1-31 May 9-11	Henry Vanderburgh, Allanburgh— 25 railway fares, Port Dalhousie and return, at 75c R. F. Windeyar, architect, Toronto— Altering plans and specification of Toll Collector and		17 50	
	Customs offices, Port Colborne, so as to obtain requisite extra accommodation Railway fare from Toronto and return Hotel expenses and cab fares	30 00 4 80	39 90	
A pril 30	Grand Trunk Railway Co., Montreal— For cost of raising and lowering drawbridge at Marlatts' Pond, on Welland Railway, as requested by Superintendent of Canal—		33 34	
	18 days' wages of carpenters	32 00 3 20		
	Old Welland and Feeder Canal.		35 20	
May 1-31	Coy Bros., St. Catharines— 48 lbs. manilla rope, at 15c., \$7.20; 6 brooms, at 30c., \$1.80; 1 dead lock, 50c.	9 50		
	17 galls. machine oil, at 80c., \$13.60; 5 galls. raw oil, at 70c., \$3.50	17 10		
	135 lbs. spike, at 4c., \$6.40; 1 tub axle grease, \$3; 1	İ		
	tape line, \$2.50			
	2 paint brushes, at 621c., \$1.25; 300 ft. fuse, at 2c., \$6; 2 kegs blasting powder, \$8	20 70 15 25		
	1) lbs. lampblack, 38c.; 1] doz hooks, 28c.; 77 lbs. manilla rope, at 15c., \$1!.55	12 11	•	
Vov 1 21	7 7771		94 36	
May 1-31	77 lbs. tarred rope, at 15c., \$11.55; 80 lbs. manilla rope, at 12½c., \$10	1 21 55 1		
	9 lbs. putty, at 5c., 45c.	26 92,		

Amount chargeable to Welland Canal-Repairs and Renewals-Continued.

D	ate.	Nature of Works.	Amount.	Total.
1	887.		\$ cts.	\$ cts.
Мау	1- 31	To James Wilson, Thorold— 131 lbs. chain, \$1.28; 2 shovels, at \$1.25, \$2.50; 9 files, assorted, at 30c., \$2.70	6 48	
		lead, at 7c., \$3.50	16 10 15 30 5 75	
		4 gross assorted screws	1 00	93 10
May May	1-31 1-31	Battle & Smyth, Thorold, 56 galls. mixed paint, at 90c James Rolston, Dunnville — 133 lbs. iron, at 3c., \$3.99; 75 lbs. red lead, at 8c., \$6; 21 lbs. Paris white, at 5c., \$1.10	11 09	106 40
		at 50c., \$1.50; 26 lbs. white lead, at 10c., \$2.60	8 00 8 38	
		229 lbs. rd. iron, at 2c., \$4.58; 26 bolts, \$1.54; 12½ lbs. rope, at 15c., \$1.87	7 99	
		5c., \$3 75 2 lbs. blue paint	13 50 0 20	40.40
Мау	31	John Battle, Thorold— 8 bush. cement, at 25c., \$2; 4 brls. cement, at \$1.50, \$6 4 yds. and, \$1.75.	8 00 7 0 0	49 46
May	20	E. A. Smyth, St. Catharines—		15 00
Мау	1–31	1 cord hard block dressstone for St. Paul Street Bridge John Bradley, Merritton— Selecting stone from spoiled banks near Humberstone, breaking and loading same on scows, and unloading and trimming same along banks of feeder where banks were washed out, 4,113 yds., at \$i.10		4,524 30
Мау	1–31	R. G. Murdy, Dunnville— 6 cords stone, at \$4.5 \\ 24 yds. gravel, at 60c	27 00 14 4 0	1,021 00
May	2	James Robinson, St. Catharines-Use of tug "Mac,"		41 40
Мау	1-31	towing. E. C. Rogers—St. Catharines— ton soft coal, at \$6, \$3; ton stove coal, \$3.13	6 13	4 00
Мау	1– 31	1,240 lbs. steam coal	4 50	11 53
May	1-31	at \$4.25 Thomas Hastings, St. Catharines—		23 59
		22 days, mason and plaster, at \$3.50	15 75 2 50 3 00	
		Building foundation for bridge house and retaining wall at St. Paul Street Bridge, 2624 yards	134 81	
		paid short, at \$1 per yard, last month	25 50	
		CR.—By 2627 yards stone, at \$1	258 56 26 96	31 60
do	1-31	To James Wilson, Merritton— Blacksmith Work—		J. 90
		1,614 T bolts, repaired, at 2½c., \$40.35; 1,242 lbs. rods, repaired, at 2c., \$24.84	65 19	
		\$27.68 217	31 82	

Amount chargeable to Welland Canal—Repairs and Renewals—Continued.

Date.		Nature of Works.	Amount.	Total.
18	387.		\$ cts.	\$ cts.
May	1-31	To James Wilson, Merritton— 98 lbs. steeling, at 6c., \$5.88, 89 lbs. cast steel, at 20c. \$17 80	23 68 188 40 7 00 61 82 35 00 72 00	,
do	1-31	McCleary & McLean, Thorold— 12,313 ft. pine, at \$16, \$197.00; 2,170 ft. pine, at \$17, \$36.89 369 do 18, 6.64; 930 do 23, 21.39 7,521 ft. oak, at \$25, \$188.02; 4,110 ft. oak, at \$27, \$11.09 241 do 28	233 89 28 03 298 99 6 75	484 91: 567 66
фo	31	J. & R. Miller, A gents for Watson & Hillman, New York— 4 15-ton broad-base, low-lift, hydraulic jacks to run out 18 inches, at \$205	420 00 400 00	820 00
đo	1-31	T. & R. Miller, Port Dalhousie— 1,872 lin. ft. 10 by 12 timber framed and built in cribs and stringers, at 35c. per foot	655 20 64 20 27 52 17 40 20 00 784 32	
				584 32 12,667 42

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of June, 1887, to pay Carpenters, Laborers, Teams, &c., chargeable to Renewals and Repairs.

Сара	icity.	Whe		Names.	Time.	Rate.	Amount.
repairing Mark	Port Dalhousie atts swing bridge					\$ cts.	\$ cts.
and putting of	on new walings	Tuna	1007	U Vandanhaad	1	75 00	HF 00
do do			1001	H. Vanderburgh	I month	75 00	75 00
do	do	1 3.	•••	James Hindson Wm. Patterson	209 days	2 00 2 00	51 00 51 00
do		1 4.	•••	Alfred Coons	25± do	2 00	51 00
do	do	, ,		A. Impey	254 do	1 75	41 12,
do	do	1 1		John Doig.	25 do	1 75	44 62
do	do 🦦			R. Johnston	251 do	1 75	44 62
do	do	٠. ١	•••	Geo. Irving	14 do	1 50	21 75
do	do	1 3		Robt. Houston	15 do	1 50	23 25
do	do	. do		Jos. Johnson, team	25 do	3 50	89 25
Watchman, gate	yard and shop	,		,	1 4		İ
Port Dalhousie	e; pattern house	.)			1		
lock 13		.] do		Oscar Sharp		1 50	45 00
do	do	.l do	•••	John McMillan	30 do	1 20	3 6 0 0
Excavating, wide	ening and deepen	-(ł	1	ł	
	draw off wate			ł	1		
	up ditches along			ì	ļ	1	
	o grading up an			!	Ì	!	l
	road division a			la	l		
	ı, & c			Geo. A. Jordan		2 00	52 00
do	do	· do		James Hansell		1 50	36 37
do	do			John Madigan		1 50	36 75
do do	do	1 4.	•••	Geo. Brown	241 do	1 50	36 75
do	do		•••	John McPherson	84 do	1 50	12 37
	do	1 4.	•••	Benjamin Redfern	24½ do	1 50	36 75
do	do		•••	Levi Wilson	6 do	1 50	9 00
do	do		•••	Wm. J. Abbey	72 do	1 50	11 25
d o do	do	1 .	•••	A. McIntosh, W. B	84 do	0 75	6 37
do	do		•••	Daniel Kelly, team	164 do	3 50	57 75
Taking care of	do	, do	•••	John Hill, team	6 do	3 50	22 75
lines while no	ssing, &c	1 4.		John Hanley	15 3.	1	15 00
Repairing canal	banka and anan	· do	•••	John Hanley	15 do	1 00	15 00
ing un ditube	es between Por				1	l	}
Robinson We	lland and June	_		•	1	ĺ	
				og Clancor foromer	20 40	2 00	52 00
do	40	1		as. Clancey, foreman		1 50	38 25
do	do.	1		Hugh Bailey Michael Blake	251 do	1 50	38 25
do	do			Thos. Waldron	94 do		14 25
do	do	1 1		Geo. Nolan	81 do	1 50	12 75
do	do	.l do		William Pew	25 do	1 50	38 25
Cleaning out S	t. David's road	, -"	•••				1
tunnel, &c		. do	• • • • • • • • • • • • • • • • • • • •	Geo. Putland	4 do	1 50	6 00
ďο	do	ـ تد		Wm. Wells	4 do	1 50	6 00
do	do		• •••	Thos. Donahue	4 do		6 00
do	do		•••	Hiram Dell	. 18½ do	1 50	27 75
do	do			Thos. Hayden		1 50	7 50
do	do	. do	• •••	Alex. Winston	2 do	1 50	3 00
also cutting of	, Port Colborne Toiles and fram	<u>:</u>]					
ing waling an	d stringers, &c	. do	• •••	Wm. Finlin	26 do		58 50
Qo.	do	.) do	•	J Miller	.¦25 } do		51 00
do	ġο			J. J. Hill			52 00
do	do			L. Chase			18 00
do	do		•	G. Chase	9 do		18 00
do	do		• •••	J. Chase	9 do		18 00
- do	do	.i do	• •••	F. Sherman	. 19 <u>}</u> do	1 75	16 62
•				219			

PAY LIST in duplicate of persons employed on the Welland Canal, &c -Continued.

		1 -	oyed				
Sharpening and driv	ving piles fo	or				\$ cts.	\$ cts.
new tug Dock, &c	S	June	1887	Alfred Finlin	26 days	1 50	3 9 00
do		do		John Sutton	[26 do]	1 50	39 60
do .		do	•••	Wm. Bradley	25 do	1 50	38 25
do	3	\ do	• •••	Geo. Mathews	25½ do	1 50	38 25
do		do		Geo B. Jordan		1 50 1 50	39.00 38.25
do Penairing floats		de	,	John Sutton, horse	20 2 uo	1 50	30 Z3
Repairing floats, and building fence	w neeroarro	k		}		ì	
tender's houses, &	CC	de		W. F. Cook	26 do	2 00	52 00
do	do	de		Jacob Cook		1 50	39 00
do	do	de	·	J. Moyer		1 50	16 50
Opening up back di						İ	
brick from G.T.R				1			
stone from surplu	ıs pile to fa	ce					07.00
slopes of harbor,	&c	de		Wm. Deeks	18 ‡ do	2 00	37 00
do		de				1 50	14 25 15 00
do		de		E. Sloat		1 50	15 00 14 25
do	3.	do	•••	M. Anthes	94 do	1 50 1 50	14 25 14 25
do do	3.	de	• •••	G. Petrey	9½ do	1 50	15 00
do	4.	d)	H. Brenan J. Melhegan	10 do	1 50	15 00
do	4 .	d	•	Jas. Leslie	4 do	1 50	6.00
do	.a _	d		John Hartson	9 do	1 50	13 50
do	do	d	·	E. Bradley	2 do	1 50	3 00
do	do	ď	·	H. Cook and horse	3½ do	2 00	7 00
do	do	d		Sam. Cook, team		3 50	29 .75
OLD WELLAND CANA	AL AND FEEDS	R.					
Repairing and pul approach fences, Bridge; tearing inside, bridge t and renewing wi repairing bridge near axe factory a float bridge Sh yard, &c	St. Paul S out decay ender's hou th new wor to approa nd re-buildinickluna sh	st. ed se c; ch	•	N. Morey	261 do	2 75	72 87
do	do	d	,	P. Shortell	25 do	2 00	51.00
do	4.	ã)	S. Radcliffe	26 do	2 00	52 50
do	3.	d	·	T. Rapsey	. 26 do	2 00	52.00
do	do	d	·. ·	Chas. Hill, team	26 do	3 50	91,00
do	do	d	• ••	J.W. Boyle, watchm'ı	ı 30 do	1 00	30 00
Building retaining washed away a Benfield's Urossi	bove Lock ng; repairi	2, ng					
bank lock 4 and 1				Thos. O' Neil	. 26 do	2 00	52 00
dle chamber, &c		1 .1		John. Weaver	. 26 do	1 50	16.87
do do	do			James Boyle		1 50	12 00
do	do do	4		John Hemphill		1 50	23 00
do	do	(3	· ··	Wm. Chandler	211 do	1 7 70	32 25
do	do	! 4	· · ·	R. Wilson	. 23 do	1 50	34 87
do	do	1 4		Wm. Assell		1 05	18 75
do	do	¹ d		R Grant			30 00
Quarrying out st boating and un	loading sa	g, ne					F0.00
for general repair			0	Jas. Hamilton	. 26 do	2 00	52 00
do	3.	d	0	Arthur Bradley	. 247 do		36.37 36.37
do	3.	d	o	Jas. Faywell	. 244 do	1 1 50	34 87
do .		d	υ	Ab. Bradley	243 do	1	37 12
do .	.		o	C Dennie	. 243 do	1 7 80	16 87
uv			ο	J. Wanda	. 114 do	1 2 20	
do	do	a	ο	.l.l. Wanda	. 20# do	1 50	30 75

. PAY-LIST in duplicate of persons employed on the Welland Canal, &c.—Continued.

Capacity.	When Employed		Names.	Time.	Rate.	Amount.	
Quarrying out stone, &c. do do do do do do do do do do do do do do General repairs, facing with stone, &c	ap banks	dó do do do do		Wm. Horton	26 do 4 do 7 do 23½ do 24 do	\$ cts. 1 50 1 50 1 50 1 50 1 50 1 50 1 50 1 50	\$ cts. 14 25 39 00 6 00 10 50 81 37 36 09 16 50 23 25
do do do Rebuilding old lock gate out old and putting gates,Lock 24, repairin	in new g Hurst's	do do	•••	Robt. Pews	16 do 1 do	1 50 3 50	23 25 24 00 3 50
Bridge, &cdo do do do do do do do do do do do do d	•••••			F. T. Walton	251 do 201 do 26 do 251 do 7 do 13 do	2 75 2 00 2 00 2 00 2 00 2 00 2 00 1 75	71 50 51 00 41 00 52 00 51 00 14 00 22 75
do do do DUNNVILLE. Painting swing bridge	•••••	do	•••	Wm. Klock	21 do	1 50	22 75 31 50 32 25
do Filling up rat holes and banks, &c do do do do do do do do do do do		do	•	James Gamble J. Heffernan R. G. Murdy, team	8 do 25 do 25 do	1 25 1 25 1 25 2 50	31 25 32 19 30 00 5 00
						,	3,519 86

Accounts chargeable to Welland Canal-Renewals and Repairs.

D	ate.	Nature of Work.	Amount.	Total.
18	87.		\$ cts.	\$ cts.
June	1–30	To Coy Bros., St. Catharines— 1 pair socks for diver under water	2 00 4 50 5 00 119 60 1 50 7 30	140 80
∘đo	1–30	John Mathews, Port Colborne— 2 pr. butts, at 10c., 20c.; 4 pr. butts, at 8c., 32c.; 4 T latches, at 12½c., 50c	1 02 0 82 1 00 2 20 0 65 0 65 17 76 0 94 0 48 0 75 1 20 0 20	110 00
do	4-24	2 hooks and staples	0 28 0 82	32 22
do	4-24	John Mathews, Port Colborne— 4½ lbs. butter, 56c.; 11 loaves bread, at 6c., 66c.; 45 lbs. bran, 35c	1 57 0 35 0 70 0 65 0 25	3 4 44
do do	4	(Above for board on Government scow for men.) A. Deterling, Ridgeway—25,000 brick, at \$7 Campbell Sewer Pipe Co., Hamilton—2 6 in. bends, 60c	1 20	3 52 175 06
do	1-30	LESS—50 per cent off	0 35	0 60
June	27	do 5 prs. jacks, Thorold To Joseph Carroll, St. Catharines—Arranging and putting together 4 light gas illuminating branches for night	0 35	49 10
May	2 8	work at locks		6 00
June	23	Junction		1 50 2 50
do do	4-2 9 7-20	Robert Foster, St. Catharines— Horse and buggy, 5 days, at \$1.50, \$7.50; ½ day, \$1 do 3 do 2.50	8 50 7 50	
do	619	Horse and buggy, 2 days	5 00	21 00
do	27	James Weeks, Thorold—Repairing pump sucker Archibald McIndoe, Thorold—		1 50
do	23 25	Repairing double 10-inch block, new patent brass brush for sheave, new end piece in shell of block	1 35 0 40	1 75

Accounts chargeable to Welland Canal-Renewals and Repairs-Continued.

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts.
Jnne 28 1886. Dec. 16 Mar. 9 May 17 do 20 do 21 do 23 June 13 do 19	To E. Riddle & Son, St. Catharines—1 smoke preventive D. W. Bixby, St. Catharines— Diary, 50c., Jan. 7, 1887; almanac, 25c.; diary, 20c 2 pencil sharpeners	0 95 0 20 6 56 5 39 6 56 4 45 26 95 4 65	2 75 55 71
do 1–30	H. Vanderburgh, Allanburgh— 22 railway fares, Port Dalhousie and return, at 70c 4 do Thorold and return, at 25c	15 40 1 00	
	Thomas J. Oneil, Port Colborne— Meals and horse feed for non-resident men and horse while driving piles and framing for new dock, for tugs, Port Colborne—357 meals and horse feed, at 25c.	\$ cts.	16 40 \$ cts. 89 25
.May 31	Dickinson & Sness, Port Colborne— Advance on account of construction of canal toll-collector's office and customs house at Port Colborne, as per agreement:— Clearing for building	25 00 144 00 53 20 600 00 177 80	1,000 00
June 1-30	James Wilson, Merritton— 1,992 lbs. castings, at 3]c., \$69.72; 60 lbs. brass nuts, at 30c., \$18	87 72	123 32
do 1–30	James Rolston, Merritton— 123 lbs. rods repaired, at 1½c., \$1.85; 96 lbs. straps repaired, at 2c., \$1.92 1,413 lbs. screw bolts repaired, at 2½c	3 77 35 33 1 16 127 85 7 54	183 65
do 30	Dimensions, 110' x 35', 89'18 yds., at \$1	358 67 110 00	
	Robinson, as per contract, at \$3.25 Old Welland Canal and Feeder.	325 00	793 67
-do 1-30	Coy Bros., St. Catharines-	0 10 2 10 0 65	2 85
	223		

Accounts chargeable to Welland Canal-Staff and Working Expenses.

		1	
Date.	Nature of Work.	Amount.	Total.
1886.		\$ cts.	\$ cts.
June 1-30 do 1	To James Wilson, Thorold— 550 lbs. spike, at 4½c., \$24.75; 5 galls. lard oil, at \$1, \$5. 4 gross screws, \$1.80; 2 locks, at 40c., 80c.; 2 dozen	29 75	
uo 1	screws. 10c	2 70	
	7 lbs. marline, at 15c., \$1.05; 6 8-in. files, at 30c., \$1.80; 1 ball twine, 20c	3 05	
	6 bolts, at 6c., 36c.; 11 lbs. washers, at 10c., \$1.10; 2 ship augers, \$2.50	3 96	
	red, 50c	4 88	
	B. potatoes, 50c	2 90	
	1 scythe, 90c.; 1 scythe handle, 90c.; 4 scythe stones, 60c.	1 64 2 40	
	Brick	3 00	54 28
	A. Mitchell, St. Catharines-		
	1 brl. water lime	*********	1 65
do 1-25	25 lbs. White lead, at 8c., \$2; 1 can, 25c	2 25	
	\$6	6 15 2 70	
	3½ lbs. tarred marline, 70c.; 1 axle, \$1; 1 draw knife, \$1. 2 warding files, 25; T. S. file, 10c; 15 mixed line, \$1.88 2 steel nails, 10c.; 3 ship augers, \$3.75; 1 eye auger,	2 23	
	Paid freights, \$1.50; 1 helling ring, 10c.; 3 lbs. glue, 9c	4 60 2 50	
	1 whetstone, 10c.; 2 gals. raw oil, \$1.50; putty, 15c	1 75	
	10 lbs. putty, 40c.; ½ gal. turpentine, 50c.; ½ gal. black japan, 75	1 65	
	1 whetstone	0 10	23 93
do 1-30	McCleary & McLeod, Thorold— 2,637 ft. pine, at \$16, \$42.19; 2,041 ft. pine, at \$18,	3	
	\$36.74	78 93 10 35	
	1 119 do at \$30, \$3.57: 536 do at \$35, \$18.76	22 33	
	2,985 ft oak, at \$26, \$74.62; 857 ft. oak, at \$27, \$23.14 135 do at \$28, \$3.78; 27 do at \$30, \$81 600 ft. lattice, at \$5, \$3; 2 cedar posts, at \$20, \$4	97 76 4 59	
	600 ft. lattice, at \$5, \$3; 2 cedar posts, at \$20, \$4 Dressing and tapering oak stick	7 00 1 50	
	Charles McDermott & Co., St. Catharines-		222 46
Jan. 14-20	2 steel ice chisels, \$2; repairing 15 ice chisels, \$4.75	6 75	
	repairing 2 burs, 50c.; repairing 1 bur, 25c do 4 chisels	0 75 1 00	
June 30	John Bradley, Merritton—Selecting stone from spoil banks,		8 50
	near Humberstone; breaking, loading and boating; unloading and trimming same along banks of feeder,	1	
	where banks washed out, 464 yards, &c. at \$1.10		510 40
May 30-31.		15 50	
June 26-27-2	8 171 meals	42 75	58 25
	24, while navigation was stopped by lock gate sill, &c., out of order.		3,582 56
· ·			0,002 00

STAFF AND WORKING EXPENSES.

FROM 1ST JULY, 1887, TO 31ST DECEMBER, 1887.

PAY-LIST in duplicate of persons employed on the Old Welland Canal and Feeder during the month of July, 1887, to pay Permanent Establishment, chargeable to Staff and Working Expenses.

		1	ī		
Capacity.	When Employed	Names.	Time.	Rate.	Amount.
				\$ cts.	(P. 045
Overseer	July, 1887	J. B	1 month	\$ cts.	\$ cts. 100 0 0
Master, Lock 1 and Bridge	do	J. B. Smyth.	1 do	42 00	42 00
Assistant		B. Merrit	1 do	42 00	42 00 42 00
do	do	John Woodall	1 do	42 00	42 00
do	do	R. Hadgraft	1 do	42 00	42 00
Master, Lock 2 and Bridge	do	John House	1 do	42 00	42 00
Assistant		W. Weaver		42 00	42 00
do	do	T. Johnson		42 00	42 00
do	do	W. H. Charles		42 00	42 00
St. Paul Street Bridge	do	John Sullivan		42 00	42 00
Assistant		W. McClorey		38 00	38 00
Master, Lock 3	d o	Tim. Sullivan		38 00	38 00
Assistant		Alex. Walker		38 00	38 00
do		Fred Shirer		38 00	38 00
Master, Lock 4 and Bridge		Jas. Livingstone		42 00	42 00
Assistant		James Boyle		42 00	42 00
Master, Locks 5, 6, 7 and Bridge		Robert Boyle		42 00	42 00
Assistant		Michael White	1 do	42 00	42 00
Master, Locks 8, 9, 10 and 11		B Clarke		38 00	38 00
Assistant	do	l ~ ~		38 00	38 0 0
Master, Locks 12, 13, 14 and 15		James Cagan		38 00	38 00
Assistant	do			38 00	38 00
Master, Locks 16, 17 and 18		. B. Darby		38 00	38 00
Assistant		R. Gibson		38 00	38 00
Master, Locks 19, 20 and 21	do	E. McLaughlin		38 00	38 00
Assistant	do			38 00	38 00
Master, Lock 22 and Bridge		. John McNamara		38 00	38 00
Assistant		A. W. Bradley		38 00	38 00
Master, Lock 23, 24 and Bridge		John Neil		42 60	42 00
Assistant		D. Ryckman		38 00	38 00
Master, Lock 25 and Guard Lock.	do	.John Fluellyan		38 00	38 00
Assistant	do	. Rufus Swazzie		38 00	38 00
Hurst's Bridge	do			38 0 0.	38 00
Marlatt's do	dc	. Nelson Higgins		38 00	38 00
Allanburgh Bridge	do			38 0 0	38 00
do Lock	do	. Wm. Higgins		38 0 0	38 00
Assistant	do	. Lewis Mosier	l do	38 00	38 00
Allanburgh Guard Lock	do	. Aaron Higgins	1 do	38.00	38 00
Assistant	do	. Oscar Upper	1 do	38 00	38 00
Foreman on banks	do .			38 00	38 0 0 -
Feeder Division.					
Overseer	do	John E. Scott	l do	800 00	66 67
Junction Lock		Geo. Hannah		38 00	38 00
Feeder F. Bridge		John Henderson		10 00	10 00
Stromness Bridge		George Harris		38 00	38 00
Port Maitland Lock		M. Corcoran		38 00	38 00
Assistant	do .	Wm. Brenan		38 00	38 00
Regulating water at Dunnville	do	Chas. Thrush		38 00	38 00
U			1	1	
e e e e e e e e e e e e e e e e e e e			1	Į.	1
	1	į I	ŧ	•	1

Accounts chargeable to Old Welland and Feeder Canal, Staff and Working Expenses.

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts.
July 1-30 do 1-30	To Dunnville Electric Lighting Co., Dunnville—Lighting swing bridge and guard lock		10 34 1 80 12 14

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of July, 1887, to pay Permanent Establishment and accounts, chargeable to Staff and Working Expenses.

Capacity.	Wh Emplo		Names.	Time.	Rate.	Amount.
		-			\$ cts.	\$ cts.
Superintendent	July.	1887.	Wm. Ellis	1 month	2,900 90	241 67
Paymaster	ďó		R. D. Dunn			116 67
Accountant	do		J. E. Lawrence		1,000 00	83 33
Harbor master-Pt. Dalhousie	do		Wm. Cook		750 00	62 50
do Pt. Colborner	do		C. H. Carter		750 00	62 50
Overseers-Division No. 1	do		J. G. Demare		100 00	100 00
do do 2	do		Jas. Dell	1 do	75 00	75 00
do do 3	do		A. Hamilton		60 00	60 00
do do 4	do		J. R. Secord		65 00	65 00
Storekeeper, &c	do		W. W. Wait		0.00	65 00
Messenger, &c	do	•••	Thos. J. Hartley			38 75
In charge of steel and iron bridges,		•••		1		00.0
also steam pumps, &c	do		W. Chatfield	1 do	75 00	75 00
Division No. 1.						
Devision 110. 1.					l	
Ferryman	July,	1887	F. Smith	26 days	1 40	36 40
Master, Lock 1	do	•••	J. W. Woodall	ll month	42 00	42 00
Assistant	do		Geo. Howe		1 4 2 00	45 00
do	do	•••	Jno. Paxton	1 do	1 - 00	45 00
do	do		Jno. Williams	1 do	45 00	45 00
Master, Bridge 1	do				45 00	45 00
Assistant	j do		P. Ohnith	1 do	45 00	45 00
Master, Lock 2	do				47 00	47 00
Assistant	do		W. T. Smith		45 00	45 00
do	do		Geo. Bowman		45 00	45 00
do	do		Richard Hutton		45 00	45 00
Master, Lock 3	do		Isaac Johnston		47 00	47 00
Assistant	do	•••	James Keys		45 00	45 00
do	do		Con. Gorman		45 00	45 00
do	do		Jas. Grogan		45 00	45 00
Master, Bridge 2	do	•••	John Flynn		45 00	45 00
Assistant	do	•••	H. Alexander		45 00	45 00
Master, Lock 4	do	•••	Jas. Franklin		47 00	47 00
Assistant	do		Samuel Hopkins		45 00	45 00
do	do		Samuel Duffin		45 00	45 00
do	do		Wm. Altoft		45 00	45 00
Master, Lock 5	do		Thos. Scott	11	47 00	47 00
Assistant	do	•••	Jno. Pennington		45 00	45 00
do	do		Thos. Jones	11 3-	45 00	
•	1 5		John Wilde		45 00	45 00
do			G. H. Brownell			45 00
wraseri prinks s	1 40	•••	226	11 do	45 00	45 00

PAY LIST in duplicate of Persons emyloyed on the Welland Canal, &c .- Continued.

Capacity.	Who Empl		Names.	Time	.	Rate.	Amount.
Assistant	July,	1887	M. Morarity	1 month		45 00	\$ cts. 45 00
Master, Lock 6	do	1001	Peter Paxton		*	47 00	47 00
Assistant	do	•••	John Daley			45 00	45 00
do	do		Chas. Newbold	1 do		45 00	45 00
do	do	•••	G. W. Bowman	1 do		45 00	45 00
Master, Bridge 5	ďo	•••	Wm. Elliott	1 do	•••	45 00	45 00
Assistant	do		Geo. Spooner		•••	45 00	45 00
Master, Lock 7	do do		C. B. Hare		•••	47 00	47 00
Assistantdo	do	•••	M. Sullivan	1 do	•••	45 00 45 00	45 00 45 00
. do	do	•••	Wm. Boyle R. Freeman	l do l do		45 00	45 00
Master, Bridge 6	do		J. W. Grant.	1 do	***	45 00 45 00	45 00
Assistant	do	•••	Alex. Stewart	1 do	:::	45 00	45 00
Master, Lock 8	do	•••	Nich. Hayden	1 do		47 00	47 00
Assistant	do	•••	Wm. Reid	1 do		45 00	45 00
do	do	•••	R. Secord			45 00	45 00
do	do	•••	M. McCormick	1 do		45 00	45 00
Master, Lock 9	do		R. H. Watson			47 00	47 00
Assistant	l do	•••	Geo. Millward	1 do		45 00	45 00
do	do		J. C. Longley			45 00	45 00
do	do		Alex. Bradley			45 00	45 00
Master, Bridge 7	do		Jas. Whitten		••••	45 00	45 00
Assistant	do		Jno. Cushman		•••	45 00	45 00
Master, Lock 10	do		James Bradley		••••	47 00	47 00
Assistantdo	do		Jas. Mulvey		••••	45 00	45 00
do	do do		Henry Hare Thos. Nelson			45 00 45 00	45 00
Master, Bridge 8	do		Arthur Cain		••••	45 00 45 00	45 00
Assistant	do		Jno. McGearchie		***	45 0 0	45 00 45 00
Master, Lock 11	do		Jas. Reynolds			47 00	47 00
Assistant	do					45 00	45 00
do	do					45 00	45 00
do	do	• • • •	James Hebster			45 00	45 00
Master, Lock 12	do	•••				47 00	47 00
Assistant	do	• • • •	E. Bradley			45 00	45 00
do	do					45 0 0	45 00
do] do		Jas. McBride		•••	45 00	45 00
Master, Lock 13	do				•••	47 00	47 00
Assistant	do				•••	45 00	45 00
dodo	do				•••	45 00	45 00
do	do	•••	John Sewin	l do	•••	45 00	45 00
Division 2.							
Master, Bridge 9	do		Peter Secord	. 1 do		45 00	45 00
Assistant			John Black	i do	•••	45 00	45 00
Master, Lock 14			Con. Nestor		•••	47 00	47 00
Assistant	do		1 1 2		•••	45 00	45 00
do	do		John Strong	. 1 do		45 00	45 00
do					•••	45 00	45 00
Master, Lock 15			Thos. Aikens		•••	47 00	47 00
Assistant					•••	45 00	45 00
do			W. J. Wilson		•••	45 00	45'00
do		• ••	Robt. Boyle	. 1 do	•••	45 00	45 00
Master, Lock 16	do		Thos. Burley		•••	47 00	47 00
Assistant			Samuel Bradley		•••	45 00	45 00
dodo			John Holland	1. 2.	•••	45 00	45 00
Master, Lock 17	de		Austin Moran		•••	45 00	45 00
Assistant	de	`	Michael Coody F. Shuman	· l do	•••	47 00	47 00
do			Michael Glynn			45 00 45 00	45 00
do			Walter Galbraith	. 1 do	•••	45 00	45 00 45 00
Master, Lock 18.	de	` ''	J. H. Pearson	. 1 do		47 00	47 00
Assistant	. de		Geo. Newton			45 00	45 00
do		· ··	Thos. Hanna	. i do		45 00	45 00
do			Joseph Cook	i đo			45 00
$49d - 15\frac{1}{2}$					***	VP	~~ V W

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c -Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Division No. 2.—Con.				\$ cts.	\$ cts.
Master, Lock 19		R. Grisdale	1 month	47 00	47 00
Assistant	do		3 3	45 00	45 00
do do		F. Hoschke R. Grenville		45 00 45 00	45 00 45 00
Master, Lock 20		Jacob Reuteur		47 00	47 00
Assistant	do	Isaac McMann		45 00	45 00
do			1 do	45 00	45 00
do	do	Thos. Freel	1 do	45 00	45 09
Master, Lock 21		F. C. Berrimen		47 00	47 00
Assistant	do	John Cole		45 00	45 00
do	do	James Ellis		45 00 45 00	45 00 45 00
Master, Lock 22	do			47 00	47 00
Assistant	d o	Wm. Camp		45 0 0	45, 00
do	do	Wm. Boyle		45 00	45 00
do	do	Henry Philips	1 do	45 00	45 00
Master, Lock 23	d o	I. Bonewell		47 00	47 00
Assistant		Jas. Smerdon		45 00	45 00
do		I. Cornmanford		45 00 45 00	45 00
do	do	John Corbett	1 do	47 00	45 00 47 00
Assistant		M. Henderson		45 00	45 00
do	do	Thos. Bradley		45 00	45 00
do	do	Henry Kerms		45 00	45 00
Master, Bridge 10	do	Wm. Fleming		45 00	45 00
Assistant	do	F. Galbraith		45 00	45 00
Master, Lock 25		M. McCarthy		47 00	47 00
Assistant do		Geo. Dellor Samuel Campbell		45 00 45 00	45 00 45 00
do	do	Robt. Wright		45 00	45 00
Master, Bridge 12		Geo A. Thomas		45 00	45 00
Assistant		Robt. Camp		45 00	45 00
Master, Guard Lock		James Winton		47 00	47 00
Assistant		Frederick Lay		45 00	45 00
do	do	Samuel Frazer		45 00 45 00	45 00
Master, Bridge 13	do	James Cook Richard A. Higgins		45 00	45 00 45 00
Assistant		William Upper		45 00	45 00
Division No. 3.					20 00
	١.				
Master, Bridge 14		D. O'Leary	1 3. 1	45 00	45 00
Assistant	do	Geo. A. Upper Bart. O'Leary		40 00 45 00	40 00
Master, Bridge 15		Geo. Thompson		45 00	45 00 45 00
Port Robinson Ferry		R. Stevenson		36 00	36 00
do Lock	do	James McCloppin	1 do	47 00	47 00
Assistant		James Walsh	1 do	45 00	45 00
Master, Bridge 16		James Edmond		45 00	45 00
Assistant	do	Geo. P. Misner	1 do	45 00	45 00
Division No. 4.					
Welland Lock	do	Wm. Wilson	1 40	45 00	45 00
Master, Bridge 17		James Foster		45 00	45 00 45 00
Assistant		L. J. Brennan		45 00	45 00
Master, Bridge 19		Chas. Hannah		45 00	45 00
Assistant		Alex. Hannah	1 do	45 00	45 00
Humberstone Ferry		Michael Traynor		36 90	36 00
Master, Bridge 21		Emil Bonaberg		45 00	45 00
Assistant Port Colborne Lock and Bridge		Isaac Shisler John Henshaw		45 00 42 00	45 00
do qo ma pirago		John Cook		42 00	42 00 42 00
do do		John Stevens		42 00	42 00»
	•	228	•		
		-			

PAY LIST in duplicate of persons employed on the Welland Canal, &c .- Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	
Port Colborne Lock and Bridge do do do Ferry	do do do do	Wm Aikens	1 do 1 do 31 days 31 do 31 do	\$ cts. 42 00 42 00 42 00 42 00 1 50 1 50 1 50 1 50	\$ cts. 42 00 42 00 42 00 42 00 46 50 46 50 46 50 46 50	
Keeping machinery connected with the lock gate and waste weirs in proper order throughout Divisions Nos. 1 and 2	do do do do do	Samuel Houston Wm. Mossip E. Newal, h. and wg. John McMillan Thos. Ryan J. H. Booth, h. & wg. Ed. Smiley	271 do 251 do 28 do 26 do 271 do	2 00 2 00 1 50 2 00 1 75 1 50 2 00	58 00 55 00 38 25 56 00 45 50 41 25 54 00	

ACCOUNTS Chargeable to Welland Canal, Staff and Working Expenses.

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D	ate.	Nature of Work.	Amount.	Total.
1	887.		\$ cts.	\$ cts.
July	1-30	To G. N. W. Telegraph Co., St. Catharines—Telegrams per original account		11 28
do	30	G. N. W. Telegraph Co., R. A. Abbey, Agent, Port Robinson—Telegrams from May to date	•••••	1 45
do	1-30	Canadian Pacific Telegraph Co., St. Catharines—Telegrams for July		1 57
-do	1-30		****** 100000	1 29
do	1-30	Bell Telephone Co., St. Catharines—Messages per account received	•••••	4 00
do	1-31	Bell Telephone Co., Welland-Conversations during month July, &c		6 85
·do	I- 31	Bell Telephone Co., Port Colborne-Messages, &c., as per account received		9 30
đo	30	B. C. Fairfield, St. Catharines—Postage stamps		4 00
do	30	Canadian Bank Commerce, St. Catharines—Telegrams re credit May, June, July		2 00

Accounts Chargeable to Welland Canal, Staff and Working Expenses-Continued.

Date.		Nature of Work.	Amount.	Total.
18	387.		\$ cts.	\$ cts.
J uly	28	St. Catharines Welland Canal Gas Light Co., St. Catharines—Instalments on contract for lighting new canal with gas		5,000 00
do	30	To Wm. Chelno, St. Catharines-178 gallons coal oil, at 26c		46 28
đo	30	R. A. Abbey, Port Robinson— 12 gals coal oil, at 30c., \$3.60; ½ gal. machine oil, 40c ½ dozen lamp chimneys	4 00 0 45	
đo	1–30	W. N. Gardner, Welland— 18 gals coal oil, at 30c., \$5.40; 2 boxes of matches, 30c 2 gal. lard oil, 50c.; 1 light glass,5c.; 1 package tacks,5c	5 70 0 60	4 45
do	1-30	John Mathews, Port Colborne—1 gal. lard oil, \$1; 12 gals.		6 30 4 60
đo	11	coal oil, at 30c., \$3.60 H. Jarvis & Co., St. Catharines— 1 Dominion ensign, 28 feet Repairing flag 6 yards bunting	32 00 1 50 1 80	
do	4	Beckett & Co., St Catharines-1 slip ladder for office		35 30 3 00
do	2	H. Carlisle & Co, St. Catharines— 13 window rollers, at 50c 13 tassels, at 9c, \$1.17; 7 yds. cord, at 2c., 14c		
do	ì–30	A. Thompson, Welland—43 weeks' board and lodging for C. H. Carter, in charge of aqueduct at Welland, at \$4		7 81 17 70
do	1-31			
đo	19	R. D. Dunn, Paymaster, St. Catharines— Horse and waggon 1 day along canal paying men	2 50	20 00
đo	22-23	do 1 day, \$2.50; expenses horse and assistant, \$1	3 50 1 65	
uo	44-40	and return	3 00	<u>!</u>
		counts, at \$3	9 00	19 65
do	1-31	penses for 8 railway bridge tenders. St. Catharines and	i	
do	31			360 00
		list of vessels passing through Lock 7, Welland Canal 283 lines at 4c	? ' ·····	11 32
				5,578 15

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of August, 1867, to pay Permanent Establishment and Accounts, chargeable to Staff and Working Expenses.

Capacity.	Whe Emplo		Names.	Time	Rate.	Amount.
unosinton dant		1007	W		\$ cts.	\$ c
aymaster	Aug.,	1881	Wm. Ellis R. D. Dunn	1 month	2,900 00	241 6
ccountant	do	•••	J. E. Lawrence	1 do 1 do	1,400 00 1,000 00	116 6 83 3
arbor Masters-	40	•••	J. 2. 24 Tellec	1 40	1,000 00	63 3
Port Dalhousie	do		Wm. Cook	1 do	750 00	62 5
Port Colborne	do	•••	C. H. Carter	1 do	750 00	62 5
verseers-			IGB			
Division No. 1do	do do	•••	J. G. Demare	1 do	100 00	100 0
do 3	do		Jas. Dell A. Hamilton		75 00 60 00	75 0 60 0
do 4	do		T. R. Secord		65 00	65 0
torekeeper, &c	do	•••	W. W. Wait	1 do	65 00	65 0
essenger, &c	do	•••		31 days	1 25	38 7
charge of steel and iron bridges,	٠.					
also steam pipes, &c	do	•••	W. Chatfield	1 month	75 00	7 5 0
Division No. 1.						
ort Dalhousie Ferry	do		Frank Smith	27 dave	1 40	37 8
aster, Lock 1	do		J. W. Woodall		42 00	42.0
ssistant	do		George Howe		45 00	45 0
do	do		John Paxton	1 do	45 00	45 0
do	do	•••	Thos. Williams	1 do	45 00	45 (
aster, Bridge 1	do	•••	Frank Darby	l do	45 00	45 (
aster, Lock 2	do do		Phil. Ohnith	1 do	45 00	45 (
ssistant	do		Alph. Kelly Geo. Bowman	1 do 1 do	47 00 45 00	47 (
do	do		Wm. L. Smith	1 do	45 00	45 (45 (
do	do	•••	Rich. Hatton	1 do	45 00	45 0
laster, Lock 3	do		Isaac Johnston	1 do	47 00	47 0
ssistant	do		James Keys	1 do	45 00	45 0
do	do	•••	Con. Gorman	1 do	45 00	45 (
aster, Bridge 2	do do	•••	Jas. Grogan John Flynn	1 4 3.	45 00 45 00	45 € 45 €
ssistant	do		H. Alexander	1 do	45 00	45 (
laster. Lock 4	do		Jos. Franklin	1 do	47 00	47 (
ssistant	do		Saml Hopkins	1 do	45 00	45 (
do	do		Saml. Duffin	1 do	45 00	45 (
do	do		Wm. Altoff	1 do	45 00	45 (
laster, Lock 5	do	•••	Thos. Scott	1 do	47 60	47 (
do	do do	•••	John Pennington Thomas Jones	1	45 00 45 00	45 (45 (
do	do		John Wilde	1 do	45 00	45 (
aster, Bridge 3	do	•••	G. H. Brownlee	1 do	45 00	45 (
ssistant	do		M. Morarity	1 do	45 00	45 (
laster, Lock 6	do		Peter Paxton		47 00	47 (
ssistant	do	•••	John Daley	1 do	45 0 0	45
do	do do	•••	Chas. Newbold W. Bowman	1 do 1 do	45 00 45 00	45 45
laster, Bridge 5	do	•••		1 do	45 00 45 00	45
ssistant	do	•••	Geo. Spooner	1 do	45 00	45
laster, Lock 7	do	•••	C. B. Hare		. 47 00	47
ssistant	do	•••	M. Sullivan		45 00	45
do	do	•••	Wm. Boyle		45 00	45
do	do do		R. Freeman Ja ¹ . W. Grant	1		45 45
ssistant	do		Alex. Stewart			45 45
aster. Lock 8	do	•••	Maria I. Translation			47
ssistant	do	•••	1777 TO "1		45 00	45
do	do	•••	Robt. Secord	1 do	1 00	45
do	do	•••	M. McCormick	1 do		45
laster, Lock 9	do		R. H Watson	1	1 4 2 00	47
ssistantdo	do do		Geo. Millward Jos. C. Longley		1 4 - 44	45 45
				1 do	. 40 111	. 40

PAY LIST in duplicate of persons employed on the Welland Canal, &c .- Continued.

Emplo	yed —	Names.		lime.	_ _	Rate.	Amount
	i					\$ cts.	\$ 0
					ı]	45 00	45
					••		45
				3 -)		45
				•	١.		45
do					- 1	45 00	45
do					[45 00	45
				3	ı		45
				3 -	- 1		47 45
							45
				3 -	- 3		45
do				1 .		47 00	47
do	•••	E. Bradleys	. 1	do .		45 00	45
do						45 00	45
				3.	- 1	45 00	45
							47 45
				1	1		45
do				•		45 00	45
					١		
				do		45 00	45
					···[45 00	45
					•••		47
				1	- 1		45
	•••	Joun Strong	1	1 .	- 1		45 45
				•	- 1	-:	47
				•		45 00	45
do	•••			dο		45 00	45
	•••					45 00	45
					- 1		47
				1	- 1		45 45
							45
							47
				n .		45 00	45
	• •	Mich. Flynn	. 1	-		45 0 0	45
		Gas Newton	· ‡		1		
				•			
		R. Gr sdale	1	,			
do				ďο		45 0 0	45
	••			1			
	••						
	••						
	••				1		1 4-
. do	••	Thomas Freel	! 1				
. do						47 00	47
1 -	••	John Cole	1	do			
1				ďο	•••		
				_			
							1
. do							
. do		. Jas. Smerdon	1	do		45 00	45
		.J. Commarford	1	_			
	do do do do do do do do	do do	do James Whitten do James Bradley do Henry Hare do Thomas Nelson do Arthur Cain do John McGeachie do James Reynolds do James Webster do Wr P Burleigh do James Webster do Wm Strong do F. Mugham do James McBride do Thos. Keating do Jos. Turner do Alex Soper do John Lewin do John Strong do Thomas Flynn do James McAuley do W J Wilson do Kaml. Bradley do W J Wilson do Moran do Holland do Mich. Coady do Mich. Coady do Mich. Coady do Mc Galbraith do Jas. S. Pearson do Geo. Newton do Geo. Newton do Fred Hoschke do R. Grenville do Janes Elli do Janes Hanna do John Collins do Janes Hanna do John Collins do Holland do Jacob Reuter do Janes Herel do Jacob Reuter do Janes Herel do Janes Hanna do John Collins do Fred Johnson do Fred Hoschke do R. Grenville do Janes Elli do Adelbert Clarke do Wm Boyle do Thomas Freel do Janes Elli do Adelbert Clarke do Wm Boyle do Thos Bonewell Jas. Smerdon John Cole Jas. Smerdon John Cole Jas. Smerdon John Sonewell Jas. Smerdon John Sonewell Jas. Smerdon John Cole Jas. Smerdon John Cole Jas. Smerdon John Cole Jas. Smerdon John Cole Jas. Smerdon John Cole Jas. Smerdon John Cole Jas. Smerdon John Cole Jas. Smerdon John Cole Jas. Smerdon John Cole Jas. Smerdon	do	do	do	Aug., 1887 John Cushman

PAYLIST in duplicate of persons employed on the Welland Canal -Continued

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Division No. 2-Con.	-	and the second second		\$ cts.	\$ cts.
Master, Lock 24	Aug., 1887	K. Campbell	1 month	47 00	47 00
Assistant	do	M. Henderson	1 do	45 00	45 00
<u>d</u> o		J. Bradley		45 00	. 45 00
do		Henry Kerns	1 do	45 00 45 00	45 00 45 00
Master, Bridge 10		Wm. Flemming J. Galbraith		45 00	45 00
Assistant Master, Lock 25		M. McCarthy		47 00	47 00
Assistant	do	Geo. Detton	1 do	45 00	45 00
do	do	Saml. Campbell	1 do	45 00	45 00
do	do	Robt Wright	1 do	45 00	45 00
Master, Bridge 12	do	Robt. Camp		45 00	45 00
Assistant	do	Geo. A. Thomas		45 00	45 00
Master, Guard Lock	do	James Winton		47 00	47 00
A sistant		Saml. Frazer		45 00	45 00 45 00
do		Fred. Lay		45 00	45 00
Master, Bridge 13		James Cook Rich. Higgins		45 00 45 00	45 00
Assistant	do	William Upper	1 do	45 00	45 00
TENERAL DIGITAL CONTRACTOR CONTRA	· · · · · · · · · · · · · · · · · · ·	Oppor	- ""	"	20 00
Division No. 3.		4	•		
Master, Bridge 14	. do	Danl. O'Leary		45 00	45 00
Assistant		Geo. A. Upper	1 do	40 00	40 00
Master, Bridge 15		Bart O'Leary		45 00	45 00
Assistant		Geo. Thompson		45 00	45 00
Port Robinson Ferry		R. Steven on		36 00	36 00
do Lock		James McCoppen		47 00 45 00	47 00 45 00
Assistant		James Walsh James Edwards		45 00	45 00
As: i tant		Geo. P. Mi ner		45 00	45 00
215,1 0410,	1	0.001 2 1 22 20 1 1 1 1 1			
Division No. 4.	1				
Welland Lock	do	William Wilson		45 00	45 00
Master, Bridge 17		James Foster		45 00	45 00
Assistant		Luke J. Brenan		45 00	45 00
Master, Bridge 19		Chas. Hannah	1 3 - 1	45 00	45 00 45 00
Assistant		Alex. Hannah Michael Trayner	1	45 00 36 00	36 00
Humber's Ferry		E. Bonabery		45 00	45 90
Master, Bridge 21	1 .	Isaac Shisler		45 00	45 00
Port Colborne Lock and Bridge.		John Henshow		42 00	42 00
do do		John Cook		42 00	42 00
do do		John Stevens		42 00	42 00
do do		Wm. Aikens		42 0 0	42 00
_ do do	. do	J. Dunlap	1 do	42 00	42 00
Port Colborne Ferry		John Bradley	1 do	42 00	42 00
Signalling and controlling safe			1		
passage of vessels and steamer			1		
through aqueduct at Welland		Joseph McMurrow	31 days	1 50	46 50
night and day do do	1 3.	Joseph McMurray James Nixon		1 50	46 50
do do	1 1	Robert Simpson		1 50	46 50
do do	1 1	TTT BT'	1	1 50	46 50
Machinists. Division Nos. 1 and 2. Keeping machinery connected with lock gates in proper orde					·
throughout day and night		Samuel Houston	32½ do	2 00	65 00
do do	1 1-			2 00	56 00
do do	. do	Ed. Newall, h. & wg	. 15½ do	1 50	23 25
do do	. do	John McMillan	33 do	2 00	66 00
do do	. do	Thomas Ryan		1 75	56 00
do do					48 00
Diver.	. do	Ed. Smiley	. 22≩ do	2 00	44 50
Assisting ferryman, Port Col	. do	E. Bradley	2 do	1 50	3 00
borne.	· uo	Jas. Diadich	2 do	1 400	1 500

Accounts chargeable to Welland Canal, Staff and Working Expenses.

Da	ate.	Nature of Work.	Amount.	Total.
18	887.		\$ cts.	\$ cts.
Aug.	1-31	To G.N.W. Telegraph Co., St. Catharines—Telegrams during month		16 07
do	1-31	C.P.R. Telegraph Co., St. Catharines-Telegrams during	***************************************	
do do	1–31 1–31	month Bell Telephone Co., Welland—Conversation during month. The Journal Printing Co., St. Catharines—Advertising list of vessels passing through lock 7, Welland Canal,		8 65. 4 80.
		250 lines, at 4c		9 20
do do	6 24	4 brls lubricating oil, 190 galls., at 65c	123 50 49 27	172 77
do .	30	Henry Mussen, Allanburgh— 7 galls. coal oil, at 30c., \$2.10; 2 galls. lard oil, at \$1, \$2 3 chimneys		
do	1-31	R. A. Abbey, Port Robinson-7 galls. coal oil, at 30c		4 35 2 10
do	1-31	W. N. Garden, Welland— 30 galls. coal oil, at 30c, \$9, 12 lbs. oatmeal, 50c 2 lbs. nails, 10c.; 2 box matches, 30c.; 2 large burners, 40c. 1 bridge broom, 75c.; ½ gall. lard oil, 50c	0 80	11 PP
do	1–31	John Mathews, Port Colborne— 24 galls. coal oil, at 30c., \$7.20; 1 broom, 25c.; 1 yard wick, 5c	7 50	11 55
do	1-31	A. Thompson, Welland-43 weeks board for C. H. Cartier,		7 65
do	1–31	in charge of aqueduct, Welland, at \$4		17 70-
do	1–31	W. W. Wait, St. Catharines—Services horse and waggon for delivering supplies to and from store		360 00 20 0 0
do do do	17 18 19 23–24	R. D. Dunn, St. Catharines— Horse and buggy, Port Dalhousie paying men do Robinson do Expenses assistant and horse, do Railway and hack fare Welland and return do Port Colborne. Dunnville and	1 50 2 50 1 00 1 55	20 0
		return	1	
		and accounts, at \$3	9 00	18 55
				653 39

PAY LIST in duplicate of persons employed on the Old Welland Feeder Canal during the month of August, 1887, to pay Permanent Establishments, chargeable to Staff and Working Expenses.

Master, Lock 1 and bridge	Fime.	Rate.	Amount.
Master, Lock 1 and bridge do John Woodall 1 do John House 1 do John House 1 do John House 1 do Johnson 1 do Johnson 1 do Johnson 1 do Johnson 1 do Johnson 1 do Johnson 1 do Johnson 1 do Johnson 1 do Johnson 1 do Johnson 1 do Johnson 1 Assistant Johnson 1 do Johnson 1 Assistant Johnson 1 Master, Locks 12, 13, 14 and 15 <td></td> <td>\$ cts.</td> <td>\$ cts.</td>		\$ cts.	\$ cts.
Assistant	onth	100 00	100 00
do	do	42 00	42 00
do	do	42 00	42 00
Master, Lock 2 and bridge.	do	42 00	42 00
Master, Lock 2 and bridge.	dol	42 00	42 00
Assistant	do	42 00	42 00
do	do	42 00	42 00
Master, St. Paul Street Bridge	do	42 00	42 00
Master, St. Paul Street Bridge do Wm. McClorey 1 Master, Lock 3 do T. Sullivan 1 Master, Lock 4 and bridge do Alex. Walker 1 Master, Lock 4 and bridge do James Livingston 1 Master, Locks 5, 6, 7, and bridge do Robert Boyle 1 Master, Locks 8, 9, 10 and 11 do Barney Clarke 1 Master, Locks 12, 13, 14 and 15 do Barney Clarke 1 Assistant do Martin Nester 1 Master, Locks 16, 17 and 18 do Barnet Darby 1 Assistant do Robert Gibson 1 Master, Locks 19, 20 and 21 do Robert Bradley 1 Assistant do John MeNamara 1 Assistant do John Neil 1 Assistant do John Fluelyn 1 Assistant do John Fluelyn 1 Assistant do John Fluelyn 1 <td< td=""><td>do</td><td>42 00</td><td>42 00</td></td<>	do	42 00	42 0 0
Assistant	do	38 00	38 00
Master, Lock 3 do Alex. Walker	do	38 00	38 00
Assistant	3	38 00	38 00
Master, Lock 4 and bridge		38 00	38 00
Assistant		42 00	42 00
Master, Locks 5, 6, 7, and bridge. Assistant.		42 00	21 00
Master, Locks 5, 6, 7, and bridge. do Robert Boyle. 1 Massistant. do Michael White. 1 Master, Locks 8, 9, 10 and 11. do Barney Clarke. 1 Assistant. do James Cogan. 1 Master, Locks 16, 17 and 18. do Martin Nester. 1 Massistant. do Robert Gibson. 1 Assistant. do Robert Gibson. 1 Assistant. do John MeNamara. 1 Assistant. do John Neil. 1 Assistant. do John Fluelyn. 1 Assistant. do John Fluelyn. 1 Hurst Bridge. do A. H. Upper. 1 Allanburgh Bridge. do A. H. Upper. 1 Allanburgh Guard Lock. do Aaron Higgins. 1 Assistant. do Oscar Upper. 1 I Foreman on banks. do John Gearin. 1 Feeder Division. do Jo	do	42 00	21 00
Assistant	do		42 00
Master, Locks 8, 9, 10 and 11 do Barney Clarke 1 Master, Locks 12, 13, 14 and 15 do James Cogan 1 Assistant	do	42 00	
Master, Locks 12, 13, 14 and 15 do	do	42 00	42 00
Master, Locks 12, 13, 14 and 15 do James Cogan	do	38 00	38 00
Assistant	do	38 00	38 00
Master, Locks 16, 17 and 18	do	38 0 0	38 00
Assistant	do	38 00	38 00
Assistant	do	38 00	38 00
Master, Lock 22 and bridge	do	38 0 0	38 00
Master, Lock 22 and bridge	do	38 00	38 00
Assistant	do	38 0 0	38 00∘
Master, Locks 23, 24 and bridge do John Neil 1 Assistant do D. Ryckman 1 Master, Lock 25 and guard lock do John Fluelyn 1 Assistant do Rufus Swazzie 1 Hurst Bridge do Jacob Reuter 1 Marlatt's Bridge do Nelson Higgins 1 Allanburgh Bridge do A. H. Upper 1 Allanburgh Lock do William Higgins 1 Assistant do Asron Higgins 1 Assistant do Oscar Upper 1 Foreman on banks do John Gearin 1 Feeder Division do John E. Scott 1 Overseer do Geo. Hannah 1 Peeder Flout Bridge do John Henderson 1	do	38 00	38 00
Assistant	do	38 00	38 00
Master, Lock 25 and guard lock do John Fluelyn 1 Assistant do Rufus Swazzie 1 Hurst Bridge do Jacob Reuter 1 Marlatt's Bridge do Nelson Higgins 1 Allanburgh Bridge do William Higgins 1 Arsistant do Lewis Mosier 1 Allanburgh Guard Lock do Aaron Higgins 1 Assistant do Oscar Upper 1 Foreman on banks do John Gearin 1 Feeder Division do John E. Scott 1 Overseer do Geo. Hannah 1 Reeder Flout Bridge do John Henderson 1	do	42 00	42 00
Master, Lock 25 and guard lock do	do	38 00	38 00
Assistant	do	38 00	38 00
Hurst Bridge	do	38 0 0	38 00
Marlatt's Bridge do Nelson Higgins 1 Allanburgh Bridge do A. H. Upper 1 Allanburgh Lock do William Higgins 1 Assistant do Lewis Mosier 1 Assistant do Oscar Upper 1 Foreman on banks do John Gearin 1 Feeder Division do John E. Scott 1 Overseer do Geo. Hannah 1 Feeder Flout Bridge do John Henderson 1	do	38 00	38 00
Allanburgh Bridge do A. H. Upper 1 Allanburgh Lock do William Higgins 1 Assistant do Lewis Mosier 1 Assistant do Aaron Higgins 1 Foreman on banks do John Gearin 1 Feeder Division do John E. Scott 1 Overseer do Geo. Hannah 1 Reeder Flout Bridge do John Henderson 1	do	38 00	38 00
Allanburgh Lock	do	38 00	38 00
Arisistant	do	38 00	38 00
Allanburgh Guard Lock	do	38 00	38 00
Assistant		38 00	38 00
Toreman on banks		38 00	38 00
Teeder Division.	do	38 00	38 00
Overseer do John E. Scott 1 Junction lock do Geo. Hannah 1 Feeder Flout Bridge do John Henderson 1	do	30 00	36 00
Feeder Flout Bridge do John Henderson 1			
Feeder Flout Bridge do John Henderson 1	,	000.00	66 67
Reeder Flout Bridge do John Henderson 1	do	800 00	38 00
geeder Flout Bridge do John Henderson 1	do	38 00	
Nthanna and Database	do	10 00	10 00
Stromness Bridge do Geo. Harris 1	do	38 00	38 00
Port Maitland lock do Michael Corcoran 1	do	38 00	38 00
Assistant do Wm. Brenen	do	38 00	38 00
Regulating water gate, Dunnville do Charles Thrush 1	do	38 00	38 00
		1	1,862 67

Accounts chargeable to Old Welland Canal and Feeder, Staff and Working Expenses.

Da	te.	Nature of Work.	Amount.	Total.
188	37.		\$ cts.	\$ cts.
Aug.	31	To W. J. McCartney, Thorold - Telegrams from June, 1887, to	•	2 57
do do	27 31			5 00
do	25	bridge and guard lock, at 163c		10 34
QU	40	for banking ground along feeder		1 50
		Total		19 41

PAY-LIST in duplicate of persons employed on the Old Welland and Feeder Canal, during the month of September, 1887, to pay Permanent Establishment and Accounts, chargeable to Staff and Working Expenses.

Capacit y .	When Employed	Names.	7	Cime.	Rate.	Amount.	Super- anauation
	1887.			1	Scts.	\$ cts.	\$ cts
)verseer		J. B Smyth	١,,	month	100 00	100 00	\$5 cts 6 90
laster, Lock 11 and Bridge		B. Merritt.		3	42 0 0	42 00	0.00
Assistant		J. Woodall		do	42 00	42 00	}
do	do	R. Hargraft		do	42 00	42 00	1 58
do	do	John House	i	do	42 00	42 00	over 35 yr
Master, Lock 21 and Bridge		Walter Weaver	lî	do	42 00	42 00	01010031
Assistant		T. Johnston		do	42 00	42 00	1 58
do		W. H. Charles		do	42 00	42 00	1 58
do		M. Sullivan		do	42 00	42 00	1 58
St. Paul Street Bridge		Wm. McClorey		do	38 00	38 00	1 43
Assistant		Tim Sullivan		do	38 00	38 00	1 43
Master, Lock 3	do	Alex. Walker		do	38 00	38 00	1 43
Assistant	do	Fred. Sherer		do	38 00	38 00	1 43
Master, Lock 4 and Bridge				do	42 00	42 00	1 58
Assistant		Thos. R. Brownlee		do	42 00	42 00	1
Master, Locks 5, 6, 7 and	.1	122000	1		1= 00		l
Bridge	do .	. R. Boyle	1	do	42 00	42 00	1 58
Assistant	do .	. Mich. White		do	42 00	42 00	1 58
Master, Locks 8, 9, 10 and			1 -			1 **	1
11	do .	. B. Clarke	1	do	38 00	38 00	1 4
Assistant		. C. W. Bradley		do	38 00	38 00	1 4
Master, Locks 12, 13, 14 and			-		00 00	1 00 00	1
15		. James Cogan	11	do	38 00	38 00	1 43
Assistant		. Martin Nestor		do	38 00	38 00	143
Master, Locks 16, 17 and 18		. B Darby		do	38 00	38 00	1 43
Assistant		R. Gibson		do	38 00	38 00	14
Master, Locks 19, 20 and 21	do .	E. McLaughlin		do	38 00	38 00	1 4
Assistant		Robert Bradley		do	38 00	38 00	1 4
Master, Lock 22 and Bridge		. John McNamara		do	38 00	38 00	1 4
Assistant		. A. W. Bradley		do	38 00	38 00	14
Master, Locks 23, 24 and	uo .	W. Bladicy	. .	uo	30 00	1 00 00	1
Bridge		John Neil	l i	do	42 00	42 00	1 1 5
Assistant	do .	D. Ryckman		3.	38 00	38 00	14
Master, Lock 25 and Guard	il u o .	D. Ity Caman	``	ao	00 00	1 00 00	1
Lock		John Flullyn	1	do	38 00	38 00	1
Assistant		R. Swazzie		do	38 00	38 00	14
Hurst's Bridge		Jacob Renter		do	38 00	38 00	1 3 4
Marlatt's Bridge		Nelson Higgins			38 00	38 00	1 1 4
Allanburgh Bridge		A. H. Upper		do	38 00	38 00	1 14
Primers or St. Diff. Comment.	., 40 .	236		40	30 00	1 20 00	

PAY LIST in duplicate of Persons employed on the Old Welland and Feeder Canal, &c.—Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Super- annuation	
Allanburgh Lock	do do do	Wm. Higgins Lewis Mosier Aaron Higgins Oscar Upper	1 do 1 do 1 do	\$ cts. 38 00 38 00 38 00 38 00 38 00	\$ cts. 38 00 38 00 88 00 38 00 38 00	over 35 yrs 1 43 over 35 yrs	
Feeder Canal. Overseer	do do do do do	John E. Scott G. Hannah John Henderson Geo. Harris Mich. Corcoran Wm Brenen Chas. Thrush	1 do 1 do 1 do 1 do 1 do	800 00 38 00 10 00 38 00 38 00	66 66 38 00 10 00 38 00 38 00 38 00 38 00	1 43 4 00 1 43 1 43 1 43 over 35 yrs	
					1,862 66	56 96	

Accounts Chargeable to Old Weiland Canal and Feeder, Staff and Working Expenses.

Date.		Nature of Work.	Amount.	Total.
188		To John B. Smyth, Overseer, Merritton-	\$ cts.	\$ cts.
Sept.	30	3 months' use of horse and waggon connected with duties, at \$150	37 50 1	61 50
do	30	John E. Scott, Dunnville—Service of horse and waggon for 3 months ending September 30, sundry dates, as per original account		35 00.
do	30	G. N. W. Telegraph Co., Dunnville—Telegrams from August 11 to date		10 07
фo	30	Dunnville Electric Light Co., Dunnville—Lighting swing bridge and Guard Lock, 60 lights		10 00
May June Sep. 2	4 23 3–28	John Jenkin & Co., St. Catharines— 7 boxes matches	0 95	2 46
		1.000		. 119 03

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of September, 1887, to Pay permanent Establishment and Accounts, chargeable to Staff and Working Expenses.

		-					
Capacity.	Whe Emplo		Names.	Time.	Rate.	Amount.	Super- annuation
***************************************					\$ cts.	\$ cts.	\$ cts.
Superintendent					2,900 00	241 66	14 50
Paymaster Accountant	do	•••	A. D. Dunn J. E. Lawrence	1	1,400 00	116 66	7 00
Harbor Master, Port Dal-		•••	J. D. Dawlence	1 do	1,000 00	83 34	*******
housie	do	•••	Wm. Cook	1 do	750 00	62 50	3 75
Harbor Master, Port Col-	١.			i			
borne	do		C. H. Carter		750 00	62 50	3 75
Overseers, Division No. 1 do do No. 2	do		J. G. Demare	11 3.	100 00	100 00	6 00
do do No. 3	do		Jas. Dell A. Hamilton	l,	75 00 60 00	75 00 60 00	3 60
do do No. 4	do		F. R. Secord		65 00	65 00	3 00
Storekeeper, &c	do		W. W. Wait		1	65 00	
Messenger, &c		•••	Thos. J. Hartley	30 days	1 25	37 50	
In charge of steel and iron						!	ļ
bridges, steam pump, &c.,	do		W. Chatfield	1 month	75.00	75.00	1
	u u	•••	W. Onatheru	i month	75 00	75 00	
Division No. 1.							
Port Dalhousie Ferry	Sent.	1887	Frank Smith	26 days	1 40	36 40	l
Master, Lock 1	do		J. M. Woodall	1 month	42 00	42 00	1 38
Assistant		•••	Geo. Howe	1 do	45 00	45 00	1 69
do			Jno. Paxton		45 0 0	45 00	1 69
do	do		Thos. Williams		45 00	45 00	}
Master, Bridge 1	do do		Frank Darby Phil. Ohnith	1. 3.	45 00	45 00	į.
Master, Lock 2	do		Alp. Kelley		45 00 47 00	45 00 47 00	ļ.
Assistant.	do		Geo. Bowman		45 00	45 00	
do	do		Wm. L. Smith		45 00	45 00	1 69
do	do		Richard Hutton	1 do	45 00	45 00	
Master, Lock 3			Isaac Johnston		47 00	47 00	1
do	l do		James Keys		45 00	45 00	1
do	do	•••	Con. Gorman Jas. Grogan	l do	45 00 45 00	45 00 45 00	1 69
Master, Bridge 2			John Flynn		45 00	45 00	1 69
Assistant	do		H. Alexander		45 00	45 00	- 35
Master, Lock 4	do		Jos. Franklin	1 do	47 00	47 00	
Assistantdo			Samuel Hopkins		45 00	45 00	
dodo	do do		Wm. Altoft Samuel Duppier		45 00	45 00	1
Master, Lock 5		•••	Thos. Scott	1, ,	45 00 47 00	45 00 47 00	1 69
Assistant		•••	J. Pennington	1 do	45 00	45 00	l
do		•••	Thos. Jones	1 do	45 00	45 00	1
do			John Wilde	1	45 00	45 00	
Master, Bridge 3			G. H. Brownen M. Morarity	1 1	4 2 00	45 00	
Assistant Master, Lock 6			Peter Paxton	1.	1 4	45 00	l .
Assistant			John Daley		1	47 00 45 00	
do			Chas. Newbold		1	45 00	1
do	do	•••	Wm. Browman	1 do	45 00	45 00	1
Master, Bridge 5			Wm. Elliott	1 do	45 00	45 00	į.
Assistant Master, Lock 7			Geo. Spooner			45 00	l
Assistant	do		C. B. Hare M. Sullivan	11 46	1 45 00	47 00	1 77
do	do	•••	Wm. Boyle	1 do	4 ~ ~ ~	45 00 45 00	i
do	do		R. Freeman		4= 00	45 00	1 69
Master, Bridge 6		•••	J. W. Grant	1 do	1 4 00	45 00	
Assistant			Alex. Stewart	1 do	45 00	45 00	1
Master, Lock 8	do		Mich. Hayden			47 00	ł
Assistantdo			Wm. Reid R. Secord	1	1	45 00	Ī
do			M. McCormick		45 00	45 00 45 00	1
			_ == - <u></u>	1 20 ***		10.00	1
Master, Lock 9	1 do	•••	R. H. Watson	11 do	47 00	47 00	Ł

PAY-LIST in duplicate of persons employed on the Welland Canal, &c.—Continued.

			<u> </u>			
Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Superan- nuation.
Division No. 1.—Con.				\$ cts.	\$ cts.	\$ cts.
Assistant	Sept., 1887	Geo. Millward	1 month	45 00	45 00	
do	do	J. C. Longley	1 do	45 00	45 00	
do	do	Alex. Bradt Jas. Whitten	1 do	45 00 45 00	45 00 45 00	
Master, Bridge 7		Jno. Cushman		45 00	45 00	
Master, Lock 10		Jas. Bradley		47 00	47 00	1 77
Assistant	do	Jas. Mulvey	1 do	45 00	45 00	1 69
do		Henry Hare		45 00	45 00 45 00	1 69
Master, Bridge 8.		Thomas Wilson		45 00 45 00	45 00	
Assistant		John McGeachie		45 00	45 00	
Master, Lock 11	do	James Reynolds	1 do	47 00	47 00	
Assistant	do	Wm. Wilson	1 do	45 00	45 00	1 69
do		James Webster W. P. Burleigh		45 00 45 00	45 00 45 00	ł ·
Master, Lock 12	do	Wm. Strong	1 do	47 00	47 00	1 77
Assistant	do	¦E. Bradley	1 do	45 00	45 00	- ''
do	do	F. Mugham	1 do	45 00	45 00	!
Master, Lock 13		Jas. McBride Thos. Keating		45 00 47 00	45 00 47 00	
Assistant		Alex. Soper		45 00	45 00	ł .
do		Joseph Turner	1	45 00	45 00	ļ
do		John Lewin		45 00	45 00	
Division No. 2.						
Master bridge 9	do	Peter Secord	1 do	45 00	45 00	
Assistant		John Black		45 00	45 00	
Master, Lock 14		Con. Nester		47 00	47 00	1
Assistant		Robt. Boyle		45 00	45 00	ł
do		John Strong Thos. Flynn	1 do	45 00 45 00	45 00 45 00	100
Master, Lock 15		Thos. Aikens		47 00	47 00	1 69
Assistant		Jas. McAuley		45.00	45 00	- 169
do	. do	James Boyle		45 00	45 00	1
Montan Landa 10	. do	Abe Brenen		45 00	45 00	}
Master, Lock 16 Assistant	. do do	Sam Bradley		47 00 45 00	47 00 45 00	
do		John Holland		45 00	45 00	ļ
do	. do	. Austin Moran	l do	45 00	45 00	over 35 yrs
Master, Lock 17	. do	Michael Coody		47 00	47 00	İ
Assistantdo		F. Shannan		45 00 45 00	45 00 45 00	İ
do		W. Galbraith		45 00	45 00	
Master, Lock 18	do	J. S. Pearson		47 00	47 00	1
Assistant	. do	. Geo. Newton		45 00	45 00	1
do				45 00 45 00	45 00 45 00	
Master, Lock 19	. do	. Joseph Cook R. Grisdale		47 00	47 00)
Assistant	.] do	. F. Johnson	. 1 do	45 00	45 00	1
do	. do	F. Hoschke	1 do	45 0 0	45 00	
Magtan Look 00		R. Grenville Jacob Reuter	. 1 do . 1 do	45 00 47 00	45 00 47 00	
Master, Lock 20 Assistant	-1	Isaac McMann		45 00	45 00	Í
do	. do	. John Collins	. 1 do	45 00	45 00	1 69
do	. do	. Thos. Freel			45 00	1 69
Master, Lock 21	. dd	F. C. Berrimen		47 00	47 00 45 00	
Assistantdo	do do	John Cole		1 4 2 00	45 00	1
do	. ob	James Ellis		1 45 00	45 00	
Master, Lock 22	. do	. Wm. Hannah	. 1 do	47 00	47 00	l
Assistant	. do	. Wm. Camp		4 7 00		
dodo		. Wm. Boyle Henry Phillips	l do l do			
~~	. 40 .	239	,	. 10 40	. 10 00	

PAY-LIST in duplicate of persons employed on the Welland Canal, &c.—Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Super- annuation
Division No. 2.—Con.				\$ cts.	\$ cts.	\$ cts.
		m1 72 11		45 00		
Master, Lock 23 Assistant	do	Jas. Smerdon	1 do	47 00 45 00	47 00 45 00	
do	do	T. Commarford	1 do	45 00	45 00	1 09
do		John Corbett R. Campbell		45 00 47 00	45 00 47 00	1 09
Assistant	do	M. Henderson	1 do	45 00	45 00	
do do		Thos. Bradley Henry Kern		45 00 45 00	45 00 45 00	
laster, Bridge 10		Wm. Fleming		45 00	45 00	
Assistant	do	F. Galbraith	1 do	45 00	45 00	
Master, Lock 25 Assistant		M. McCarthy George Detler		47 00 45 00	47 00 45 00	1 77
do	do	Sam. Campell	1 do	45 00	45 00	
'do		Robt. Wright	1 3 - 1	45 00	45 00	
Master, Bridge 12 Assistant		Geo. A. Thomas Robert Camp		45 00 45 00	45 00 45 00	į
Master, Guard Lock	do	James Hinton	1 do	47 00	47 00	
Assistantdo		Fred. Day Saml. Frazer	la a. I	45 00 45 00	45 00 45 00	1 69
do		James Cook		45 00	45 00	
Master, Bridge 13 Assistant		Rich. Higgins Wm. Upper		45 00	45 00	1 69
n.ssistant	u0	wm. opper	αο	45 00	45 00	
Division 3.						
Master, Bridge 14	do	Dan'l O'Leary	1 do	45 00	45 00	1 69
Assistant		Geo. A. Upper		40 00	40 00	1.00
Master, Bridge 15 Assistant		Bart. O'Leary Geo. Thompson	1 do	45 00 45 00	45 00 45 00	1 69 1 69
et. Robinson Ferry	do	R. Stevenson	1 do	36 00	36 00	
do Lock Assistant		James McCoppin James Walsh		47 00 45 00	47 CO 45 OO	1 77
Master, Bridge 16		James Edmonds		45 00	45 00	1 69 1 69
Aszistant	do	Geo. P. Misner	1 do	45 00	45 00	
Division 4.						,
Wellard Lock	do	Wm. Wilson	1 do	45 0 0	4 5 00	
Master, Bridge 17	do	Jas. Foster	1 do	45 00	45 00	1 09
Assistant		L. J. Brennan Chas. Hannah		45 00 45 00	45 00 45 00	1 09
Assistant	do	Alex. Hannah	1 do	45 00	45 00	1 69
do		Michael Traynor	1 J. [36 00	36 00	
Master, bridge 21		Emile Bonaberg Isaac Shisler	l do	45 00 45 00	45 00 4 5 00	1 69
Port Colborne Lock and				10 00	20 00	
Bridge do	do	John Henshaw John Cook	1 3 1	42 00	42 00	1 58
do do	do	John Stevens	1 do	42 00 42 00	42 00 42 00	1 58
do do	do	Wm. Aikens	1 do	42 00	42 00	1 58
do do Port Colborne Ferry	do	Jas. Dunlap John Bradley	l do 1 do	42 00 42 00	$\begin{array}{ccc} 42 & 00 \\ 42 & 00 \end{array}$	1 58
ignalling and controlling safe passage vessels, &c., through Aqueducts, Wel-				12 00		1 30
land, night and day	do	John McMurray	30 days	1 50	45 00	
do do do do	do	James Nixon Robert Simpson	30 do	1 50	45 00	
do do	do	Wm. Nixon	30 do	1 50 1 50	45 00 45 00	

PAY-LIST in duplicate of persons employed on the Welland Canal, &c. - Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Super- annuation
Machinists. Keeping machinery connected with lock gates and waste weirs in proper order throughout night and day, Divisions I and 2 do do do do do do do do do do do do do	do do do do do	Samuel Houston William Mossip Ed. Newal, h. & w. John McMillan Thos. Ryan Jno. Booth, h. & w. E. Smiley	26 do 10 do 281 do 281 do	\$ cts. 2 00 2 00 1 50 2 00 1 75 1 75 2 00	\$ cts. 48 00 52 00 15 00 57 00 49 87 39 75 43 00 8,278 18	\$ cts.

Accounts Chargeable to Welland Canal, Staff and Working Expenses.

Date.		Nature of Work.	Amount.	Total.
18	87.		\$ cts.	\$ cts.
Sept.	1-30	To G. N.W. Telegraph Company, St. Catharines-Telegrams	. {	
•		as per account		15 41
do do	30	John Cloy, Thorold—Telephone service and messengers Bell Telephone Company, Welland—Conversations during		2 70
W.	1-50	the month		2 80
Aug.	1-3	E. Bryson, St. Catharines-Postage stamps and bands		3 25
Sept.	30	H. G. Carter, Port Colborne-Postage for 3 months ending	ļ	~ ^^
do	1-20	Sept. 30th		5 20
40	1-20	tising list of vessels passing through Lock 7	l	7 60
		The News Publishing Company, St. Catharines-		
April June	14	Advertising drawing off water	11 50	
anne	30	Subscription to Daily News, 6 months	2 00	13 50
	ļ	John Junkin & Co., St. Catharines-		20 00
_d o	29	2 dozen large flint chimneys	3 00	
July	15	1 case matches, \$4.75; 4 dozen flint chimneys, \$6	10 75	
	l	1 gross lampwick, \$1; 4 dozen large lamp burners, \$10 4 dozen brooms	11 00	
Aug.	20	dozen brooms, \$1 50; 3 dozen lamp chimneys, \$3.60	5 10	
	- 1	I dozen lamp chimneys, \$1.50; 1 gross lampwick, 70c	2 20	
Sont	1 20	Henry Mussen, Allanburgh-7 gals. coal oil at 30c., \$2.10		43 05
copt.	1-30	l gal. lard oil, \$1		3 10
фo	1-30	W. W. Garden, Welland-27 gals. coal oil at 30c., \$8.10;		0 20
		1 gal. lard oil, \$1		9 10
do	1-30	John Mathews, Port Colborne— 15 gals. coal oil at 30c., \$4.50; 1 gal. lard oil, \$1	5 50	
ų,	1-50	ton coal		
_		•		8 50
do	30	J. G. Demare, Overseer, Port Dalhousie—Services of horse] -
		and waggon, in connection with duties of overseer, 3 months ending Sept. 30th, 1887		37 50
		James Dell, Overseer, Thorold—		1
do	30	To services of horse and waggon in connection with	1	1
		duties of overseer, 3 months ending Sept. 30th, 1887		
		3 months' rent of house, \$8	. 24 00	61 50
	494	<u>-</u> 16 2:1		

ACCOUNTS chargeable to Welland Canal, &c. - Continued.

1887. Sept. 30 To A. Hamilton, Overseer, Port Robinson—	
	cts. \$ cts.
do 30 Thos. R. Secord, Overseer, Port Colborne—Railway fares for 3 months, ending September 30, 1887, as per original	24 85
do 30 A. Thompson, Welland—42 weeks' board and lodging for	29 25
do 1-30 W. W. Wait, St. Catharines—Services of horse and wag-	17 14
gon delivering supplies to and from store house	20 00
Thorold, at \$45	360 00
do 16 Horse and buggy 1 day, Port Dalhousie and Thorold	2 50
	2 50 1 25
	1 55
do 20-21 do do Port Colborne, Dunnville and	
do 16-22 3 days' board and lodging for self away from home, pay-	3 00
	9 00
do 30 Mrs. Hartley, St. Catharines—Services for 3 months, ending September 30, 1887, as charwoman, Canal Offices,	
do 30 Wm. Hutchinson, Port Dalhousie—13 tons coal, at \$6.25	5 00 81 2 5
do 30 Henry O'Loughlin, St. Catharines—5 tons coal, at \$6 25	31 25
do 30 D. Dittrick, St. Catharines—8 tons coal	50 00
	7 00
	0 00
do 30 E. Bryson, St. Catharines—Postage stamps and envelopes	77 00
per original account.	20 70
do 30 Wm. Ellis, Superintendent, St. Catharines—	
do 13-15 Cab fares, St. Catharines and Ottawa, and paid fares	5 00
and expenses to and from Ottawa, Pullman fees and refreshments, conferring with heads of department, &c. 4	1 55
I raid sundry telegrams sent and received during the	
quarter	121 51
	1,090 76

Number of Pay-list, 188. Pay list in duplicate of Persons employed on the Old Welland and Feeder Canal during the month of October, 1887, to pay Permanent Establishments, &c, chargeable to Staff and Working Expenses.

Capacity.	When Employ		Names.	Time.		Rate.	Amount.
124			* 5 6		_	\$ cts.	\$ cts.
Overseer		387	J. B. Smyth	1 month		100 00	100 00
Master, Lock 1 and Bridge	do		B. M errith		•••	42 00	42 00
Assistant	do		J. Woodall		•••	42 00	42 00
do	фo		R. Hargraft		•••	42 00	42 00
do	do		Jno. House		•••	42 00	42 00
Master, Lock 2 and Bridge	do		W. Weaver		•••	42 00	42 00
Assistant	go		T Johnson		•••	42 00	42 00
do	do do		W. H. Charles		•••	42 00	42 00
do	do		J. Sullivan		•••	42 00	42 00
Master, St. Paul Street Bridge	do		Wm. McClory		••••	38 00	38 00
Assistant Master, Lock 3	do	***	Tim. Sullivan		•••	38 00	38 00
A ======		••••	Alex. Walker		•••	38 00	38 00
Assistant Master, Lock 4 and Bridge	do.		Fred. A. Shirer		•••	38 00 42 00	38 00
	do		Jas. Livingston		•••		42 00
Assistant	do		T. R. Brownlee		•••	42 00 42 00	42 00
Assistant	do		Robert Boyle Michael White		•••	42 00	42 00 42 00
Master, Locks 8, 9, 10 and 11	do		Barney Clarke		•••	38 00	38 00
Aggistant	do				•••	38 00	38 00
Assistant	do		C. W. Bradley James Cogan		•••	38 00	38 00
Assistant	do		Martin Nestor		•••	38 00	38 00
Master, Locks 16, 17 and 18	do		B. Darby		•••	38 00	38 00
Aggistant	d o				••	38 00	
Assistant Master, Locks 19, 20 and 21	do		Robert Gibson		•••	38 00	38 00 38 00
Assistant	do		E. McLaughlin Robert Bradley		•••	38 00	38 00
Master, Lock 22 and Bridge	do		John McNamara		•••	38 00	38 00
Assistant	do		A. W. Bradley			38 00	38 00
Master, Locks 23, 24 and Bridge	do		John Neil		***	42 00	42 00
Assistant	do		D. Ryckman		•••	38 00	38 00
Master, Lock 25 and Guard Lock	do		Jno. Fleullyn		•••	38 00	38 00
Assistant	do		R. Swazzie		***	38 00	38 00
Hurst's Bridge	do		Jacob Rentier		•••	38 00	38 00
Marlatt's do	do		Nelson Higgins		•••	38 00	38 00
Allanburgh do	do		A. H. Upper		•••	38 00	38 00
do Lock	do	•••	Term Train .		•••	38 00	38 00
Assistant	do	• • • •	A		•••	38 00	39 00
Allanburgh Guard Lock		•••	1		•••	38 00	38 00
Assistant			Oscar Upper			38 00	38 00
Foreman on banks.			Jno. Gearin		•••	38 00	38 00
7		• • • • • • • • • • • • • • • • • • • •	1000		•••	,50,50	"
Feeder Canal.				1			
Overseer	do		Jno. E. Scott	1 do		800 00	66 67
Junction Lock		771	Geo. Hannah	li do	•••	38 00	38 00
Feeder, F. Bridge	do		Jno, Henderson		•••	10 00	10 00
Stromness Bridge		••	Geo. Harris			38 00	38 00
Port Maitland Lock		•••	CONTRACTOR OF THE CONTRACTOR			1 00 40	38 00
Assistant			Personal Inc.			38 00	38 00
Regulating water, &c	. do	**	Tree and tree and the		•••	1 00 00	38 00
The state of the s	1	11		1		""	1,862,6

Accounts chargeable to Old Welland and Feeder Canal, Staff and Working Expenses.

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts.
Oct. 31	To Dunnville Electric Light Co., Dunnville—Lighting swing bridge and guard lock, 2 lights, 54 nights, at 162c	•••••	9 00
d o 31	G. N. W. Telegraph Co, Dunnville—Telegrams from September 24 to date	••••••	10 53
do 4	John Sutter, St. Catharines—2 tons coal		13 00
do 31	Richard Leeson, Merritton-6 cords wood, at \$4.50		27 00
			59 53

Number of Pay-list, 187. Pay-list in duplicate of Persons employed on the Welland Canal, during the month of October, 1887, to pay Permanent Establishments and Accounts, chargeable to Staff and Working Expenses.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Superintendent	do do do do do do do do	R. D. Dunn	1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do 31 days	\$ cts. 2,700 00 1,400 00 1,000 00 750 00 100 00 75 00 60 00 65 00 65 00 1 25	\$ cts. 241 67 116 67 83 33 62 50 62 50 100 00 75 00 65 00 65 00 38 75
Division No. 1.	3-	F 1 2 11			
Port Dalhousie ferry Master, Lock 1	do	Frank Smith	26 days	1 40	36 40
Assistant	do			42 00 45 00	42 00 45 00
do		John Paxton	1 do	45 00	45 00
do	do	Thos. Williams	1 do	45 00	45 00
Master, Bridge 1	do	Frank Darby	1 do	45 00	45 00
Assistant	do	Phil. Ohnith	1 do	45 00	45 00
Master, Lock 2	do	Alph. Kelley	1 do	47 00	47 00
Assistant	do	Geo. Bowman	1 do	45 00	45 00
do	do			4 5 0 0	45 00
do	do			45 00	45 00
Master, Lock 3	do	Isaac Johnston		47 00	47 00
Assistant] do			45 00	45 00
do	j do	Con. Gorman		45 00	45 00
do	do	James Crogan	1 do	45 00	45 00
Master, Bridge 2	do	John Flynn		45 00	45 00
Master, Lock 4	do	H. Alexander		45 00	45 00
Assistant	do	Jos. Franklin	1 do	47 00	47 00
do	do	Sam. Hopkins	1 do	45 00	45 00
do	do		1 do	45 00	45 00
Master, Lock 5		Thos. Scott	ا مد ا	45 00 47 00	45 00 47 0 0
Assistant	do	Jno. Pennington		45 00	45 00
do		Thomas Jones	l do	45 00	45 00
do	do	John Wylde	1 do	45 00	45 00
		244	- • • • • • • • • • • • • • • • • • • •	10 00	, ±0.00

PAY-LIST in duplicate of persons employed on the Welland Canal, &c .- Continued.

Capacity.	Whe Emplo		Na mes.	Time.		Rat	е.	Amou	int.
Division No. 1.						\$	cts.	\$	cts.
Master, Bridge 3			G. H. Brownlee		h		00		5 00
Assistant	do		M. Morarity		•••		00		5 00
Master, Lock 6 Assistant	do do		John Daley	l do l do	•••		00		700 500
do	do	•••	Chas. Newbold	1 do			00		5 00
do	do		W. Bowman	1 do			00		5 00
Master, Bridge 5	do	•••	Wm. Elliott	1 do			00		5 00
Assistant	do	•••	Geo. Spooner		••••		00		5 00
Master, Lock 7	do		C. B. Hare. M. Sullivan				00		7 00 5 00
do	do		William Boyle		:::		00		5 00
do	do		R. Freeman				00		5 00
Master, Bridge 6	do		Jas. W. Grant	l do			00		00
Assistant	do	•••	Alex. Stewart				00		00
Master, Lock 8	do	•••	N. Hayden	l do			00		7 00
Assistantdo	do do	•••	Wm. Reid R. Secord	l do l do			00		6 00 6 00
do	do			l do			00		600
Master, Lock 9	do		R. H. Watson				00		7 00
Assistant	do		Geo. Millward				00		00
do	do			l do			00		00
do	do			l do			00		00
Master, Bridge 7	do do		James. Whitten		•••	45			00
Master, Lock 10	do		Jas. Bradley	l do l do		43 47	00		00
Assistant	do	!	Jas. Mulvey	l do		45			00
do	do		Henry Hare			45			00
do	do		Thomas Nelson			45			00
Master, Bridge 8	do	••••	Arthur Cain	L do		45			00
Assistant	do do	•••	John McGeachie	l do		45			00
Assistant	do		Alex. Wilson	l do l do		47 45			00
do	do		W. P. Burleigh	l do		45			00
do	do		Jas. Webster	do		45			00
Master, Lock 12	ďο		Wm. Strong			47			00
Assistant	do		E. Bradley		••••	45			00
dodo	do d o	•••	F. Mughan	do		45			00
Master, Lock 13	do	***	Jas. McBride	l do l d o		45 47			00
Assistant	do		Alex. Soper			45			00
do	do		Jos. Turner			45			00
do	do		John Lewin	l do		45	00	45	00
Division No. 2.		Ì	4						
Master, Bridge 9	do		Peter Secord	l do		45	00	45	00
Assistant	do		John Black			45	00	4.5	00
Master, Lock 14	do		Con. Nestor			47			00
Assistant	do	•••	Robert Boyle	do	•••	45			1)
do	do	•••	Thomas Flynn	do		45))
do	do do		Thomas Aikins	do do		45 47			00
Assistant	đo		James McAuley			45			00
do	do		James Boyle1	. do		45			00
do	do	•••	Archibald Bradley	do do		45	00		50
Master, Lock 16.	do	•••	Thomas Burley 1	_ do		47			00
assistant	do		Samuel Bradley			45			00
dodo	do do		John Holland			45 45			00
laster, Lock 17.	do		Michael Coady	do do		47			00
Assistant	do		J. Shurman	. do		45			00
go	do		Michael Glynn	. do]	45	00		00
do!	do		W. Galbraith1	. do	1	45	00 i	45	00

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c.—Continued.

Capacity.		ed	Names.		Fime.		Rate.		Amount.	
Division No. 2-Con.					·	_	\$ c	ts.	\$ ct	
Master, Lock 18			J S. Pearson				47 (7 7 1	47 00	
Assistantdo	do do		Geo. Newton Thomas Hannah			•••	45 (45 (45 00 45 00	
do	do		Joseph Cook		•		45		45 00	
Master, Lock 19	do		R. Grisdale		7 .		47		47 00	
Assistant	do	•••	F. Johnson			•••	45		22 50	
dodo	do do	•••	Abe Brenan			•••	45		45 00	
· do	do	•••	F. Hoschke	1	3 -		45 (45 (45 00 45 00	
Master, Lock 20	do		Jacob Reuter		J -		47	1	47 00	
Assistant	do	•••	Isaac McMann	1	3 -		45		22 50	
do	do		J F. Huffmann		d o		45		22 50	
do	do		Thos. Freal		_	•••	45		45 00	
Master, Lock 21	do do		John Collins F. C. Berriman		3 -	•••	45 47		45 00 47 00	
Assistant	do		John Cole		do do		45		45 0	
do	do	•••	Adelbert Clark	. li	do		45		45 0	
do	do	•••	James Ellis	. 1	do		45	00	45 0	
Master, Lock 22	do		Wm. Hannah		ďο	•••	47		47 0	
Assistant do	do do	•••	Hy. Phillips		do	•••	45		45 0	
. do	do		Wm. Boyle Wm. Camp		do do		45 45		45 0 45 0	
Master, Lock 23	do		J. Bonewell		do		47		47 0	
Assistant	do		Ja2. Smerdon		do		45		45 0	
do	do	•••	J. Commarford	$\cdot 1$	ďο		45	00	45 0	
do Master, Lock 24	do		John Corbett	. 1	ďο	•••	45		45 0	
Assistant	do	•••	1		do		47 45		47 0	
do	do	•••	m		do do		45		45 0 45 0	
do	do	•••			do		45		45 0	
Master, Bridge 10			Wm. Flemming	. 1	do		45		45 0	
Assistant	do		F. Galbraith				45		27 0	
do Master, Lock 25	do	•••					45		18 0	
Assistant		•••			do		47 45		47 0 45 0	
do			Sam. Campbell		do		45		45 0	
_ do	do	•••	Robt. Wright	1	do		45		45 0	
Master, Bridge 12		•••	Geo. A. Thomas	. 1	do		45	1	45 0	
Assistant	do	•••	Robert Camp	1	do	•••	45		45 0	
Assistant	do	•••	James Winton Samuel Frazer	.	do do		47	00	47 0 45 0	
do			Fred. Lay	. lî	do	:::		00	45 0	
do	. do		James Cook	1	do			00	45 0	
Master, Bridge 13		••	Richard Higgins	1	do	•••		00	45 0	
Assistant	do	••	William Upper	1	do	•••	45	00	45 (
Division No. 3.			*							
Master, Bridge 14	. do		Daniel O'Leary	1	do		45	00	45 (
Assistant	.l do		Geo. A. Upper		do	•••	,	00	40 (
Master, Bridge 15	. do		. Bart. O'Leary	1	do	•••		00	45 (
Assistant	i do	••	. Geo. Thompson	1	ďο	•••		00	45 (
Port Robinson Ferrydo Lock		••	. R. Stevenson	1	do	•••		00	36 (
Assistant		••	Jas. McCoppin Jas. Walsh	1	do do	•••		00 00	47 (45 (
Master, Bridge 16			Jas. Edmonds		do	•••		00	45	
Assistant			G. P. Misner		do			00	45	
Division No. 4.	1:									
Welland Lock	do		. William Wilson	1	do		AF	00	45	
Master, Bridge 17.		••	James Foster	;	do	•••	4.00	00	45	
Agsistant	do		Luke J. Brennan	î	do	•••	1	00	45	
Master, Bridge 19	. do		Chas. Hannah	11	do	•••		00	1 45	

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c - Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Division No. 4—Con.	1887.			\$ cts.	\$ cts.
Assistant	do do do do do do do do do do	Alex. Hannah	1 do 1 do 1 do 1 do 1 do 1 do 1 do 1 do	45 00 36 00 45 00 45 00 42 00 42 00 42 00 42 00 42 00 42 00	45 00 36 00 45 00 42 00 42 00 42 00 42 00 42 00
trolling safe passage of vessels through aqueducts at Welland, night and day	do do do do	Jos. McMurray James Nixon Robert Simpson William Nixon	31 do 31 do	1 50 1 50 1 50 1 50	46 50 46 50 46 50
throughout night and day.— Divisions No. 1 and 2 do do do do do do do do do do do do do do do do do do do do do Diver	do do do do do do	Samuel Houston	13 do 18 do 13 do 25 do 24½ do	1 50	54 00 26 00 27 00 26 00 26 00 43 75 36 75 54 50
_					8,274 82

Accounts chargeable to Welland Canal, Staff and Working Expenses.

Section Sect	Date.		Nature of Work.	Amount.	Total.
Month	1	887.		\$ cts.	\$ cts.
do 1-31 C. P. R. Telegraph Co., St. Catharines—Telegrams per month. month.	Oct.	1-31		1	5 59
W. N. Garden, Welland— 30 gals. coal oil, at 30c., \$9; 1 box matches	do	1-31	C. P. R. Telegraph Co., St. Catharines—Telegrams per		
John Mathews, Port Colborne 20 gals. coal oil, at 30c. \$8; 3 lamp chimneys, 30c	do	1-31	W. N. Garden, Welland— 30 gals. coal oil, at 30c., \$9; 1 box matches	9 15	1 40
Corporation account, City of St. Catharines—Portion watering street—canal office, for year 1887	фo	1–31	20 gals. coal oil, at 30c., \$6; 3 lamp chimneys, 30c	6 30 2 50 0 18	
According to the color of the	do	19	Corporation account, City of St. Catharines - Portion		
10 15,490 do \$6.25			H. O'Loughlin, St. Catharines—1 ton coal		6 50
Albert Hannah, Welland—2\frac{1}{2} \cords wood Arch. Thompson, Welland—4\frac{1}{3} \text{ weeks' board and lodging for C. H Carter, in charge of aqueducts at Welland, \$4.} 17 71	do	31	2,670 lbs. coal, \$6.75	9 01 48 41	57 40
Oct. 1-31 To Grand Trunk Railway Co., St. Catharines—I month's pay each for 8 railway bridge tenders, St. Catharines and Thorold			Arch. Thompson, Welland-43 weeks board and lodging		10 00
W. W. Wait, St. Catharines—services of horse and waggon delivering supplies to and from store house 20 00	Oct.	1-31	To Grand Trunk Railway Co., St Catharines—1 month's pay each for 8 railway bridge tenders, St. Catharines and]	
Day lists and accounts Horse and buggy, Port Dalhousie and Thorold, 1 day 2 50 do do Robinson, 1 day 2 50 Expenses, assistant, 1 horse 1 25 Railway and hack fare, Welland and return 3 00 do 21 do 22 do fare, Port Colborne, Dunnville and return 3 00 do 18 do 23 days' board and lodging, self away from home, at \$3 9 00 do 11 J. E. Lawrence, St. Catharines—railway fare and dinner, Welland and return, re Page & Co.'s lease. 1 10 do 1-31 John Hill, Port Robinson, 3 cords hard wood, at \$4.50. 13 50 do 1-31 The Journal Printing Co., St. Catharines, Advertising list of vessels passing through Lock 7, Welland Canai, 141 lines, at 4c. 5 64 Coy Bros., St. Catharines— 200 galls. coal oil, at 26c. 52 00 log do machine oil, at 65c. 128 70 180 70	do ·	`1-31	W. W. Wait, St. Catharines—services of horse and waggon delivering supplies to and from store house		
do 123 3 days board and lodging, self away from home, at \$3 9 00 19 75	do do	19 20 21 }	pay lists and accounts: Horse and buggy, Port Dalhousie and Thorold, 1 day do Robinson, 1 day Expenses, assistant, 1 horse	2 50 2 50 1 25 1 50	
Description			3 days' board and lodging, self away from home, at \$3	9 00	
do 1-31 John Hill, Port Robinson, 3 cords hard wood, at \$4.50 13 50 1 20	ďo	•	J. E. Lawrence, St. Catharines—railway fare and dinner, Welland and return, 7e Page & Co's lease		
do 1-31 Coy Bros., 8t. Catharines— 200 galls. coal oil, at 26c	do	1-31	John Hill, Port Robinson, 3 cords hard wood, at \$4.50 Henry Mussen, Allanburgh, 4 galls coal oil, at 30c The Journal Printing Co., St. Catharines, Advertising		13 50
	do	1-31	Coy Bros., St. Catharines— 200 galls. coal oil, at 26c	52 00	

PAYLIST in duplicate of persons employed on the Old Welland and Feeder Canal, during the month of November, 1887, to pay Permanent Establishment and Accounts, chargeable to Staff and Working Expenses.

Capacity.	When Employed	d	Names.	Т	'ime.		Rate.	Amount.	
						_	\$ ets.	\$ c	ts.
Overseer	Now 188	27 .1	J. B. Smith	1 m	onth.		100 00	100 0	no.
Master, Lock 1		F	3. Merritt	1	do .		42 00	42 0	_
Assistant	do .		John Woodall				42 00	42 0	
do			R. Hargraft			i	42 00	42 0	
do			John House		•		42 00	42 0	0
Master, Lock 2	do .	1	W. H. Charles	1	do .		42 00	42 0	
Assistant	do .		John Sullivan		do.	٠٠١	42 00		00
do			r. Johnson		do .		42 00	42 0	
St. Paul Street Bridge			Wm. McLosey				38 00	38 0	
Assistant			lim Sullivan				38 00	38 0	
Master, Lock 3	do		Alex. Walker			••	38 00	38 0	
Assistant			Fred. Shirer			••	38 00	38 0	
Master, Locks and Bridge			Jas. Livingstone		1	••	42 00	42 0	
Master, Locks 5, 6, 7 and Bridge	do .		r. R. Brownlee			"	42 00 42 00	42 0 42 0	
Assistant	do .		Robert Boyle		1	••	42 00	42 0	
Master, Locks 8, 9, 10 and 11	do .		Michael White Barney Clarke		1.		38 00	38 0	
Assistant	do .		C. W. Branley		3 .		38 00	38 0	
Master, Locks 12, 13, 14 and 15	do .		James Cogan		.7 -		38 0 0	33 0	
Assistant	do .		Martin Nestor			::	38 00	38 0	
Master, Locks 16, 17 and 18			Barnet Barby		a.		38 00	38 0	_
Assistant			Robt. Gibson				38 00	38 0	00
Master, Locks 19, 20 and 21			E. McLaughlin		•	[38 00	38 0	00
Assistant	do .		Robert Bradley		7 .		38 00	38 0	Ю.
Master, Lock 22 and Bridge			John McNamara		do .		38 00	38 0)()
Assistant	do .		A. W. Bradley		do .		38 00	38 0)0
Master, Locks 23, 24 and Bridge.			John Neil			1	42 00	42 0	
Assistant			D. Ryckman			••	38 00	38 0	
Master Lock 25 and Guard Lock.			Rufus Swazzie			٠٠١	38 00	38 0	
Assistant			John Fleullyn			••[38 00	19 0	
Hurst's Bridge			Jacob Rinker		э.	···I	38 00	38 0	
Marlatt's do		••••] 1	Nelson Higgins	II.			38 00	38 0	
Allanburgh Bridge			A. H. Upper			••• [38 00	38 0 38 0	-
do Lock			Wm. Higgins		•	•••	38 00 38 00	38 (
Assistant			Lewis Mosier			•••	38 00	38 (
Allanburg Guard Lock			Aaron Higgins		•		38 00	38 (-
Foreman on banks			Oscar Upper John Gearin			•••	38 00	38 (
	w .		John Gearm	1	uo .	•••	00 00	1	•
Feeder Canal.				1					
Overseer	do .	- [John E. Scott	h	do .		810 00	66 6	67
Junction Lock			Geo. Hannah				38 00	38 (
Feeder F. Bridge			John Henderson		•		10 00	10 (
Stromness do			Geo. Harris		do		38 00	38 (00
Port Maitland Lock			Michael Corcoran		-		38 00	38 (00
Assistant	1 7		Wm. Brenen		•	•••	38 00	28 (
Regulating water, &c			Chas. Thrush		-	•••	38 00	38 (00
				1				1,801	67

Accounts chargeable to Old Welland and Feeder Canal, Staff and Working Expenses.

Date.	Nature of Works.	Amount.	Total.
1887.	To G. N. W. Telegraph Co., Thorold—Telegrams as per original account.	\$ cts.	\$ cst.
do 30	G. N. W. Telegraph Co., Dunnville—Telegrams as per original account		2 24
do 30	instrument (J. B. Smyth)	••••••	35 00
	bridge		10 00

PAY LIST in duplicate of persons employed on the Welland Canal during the month of November, 1887, to pay permanent establishment and account chargeable to Staff and Working Expenses.

Capacity.		her ploy		1 3	N	ames			Time	.	Rate	.	Amour	1 t.
								_				cts.		cts.
Superintendent	Not									ıļ	2,900			67
Paymaster		do					•••••		do		1,400	1		67
Accountant		ďο					ce		ďο		1,000			33
Harbor master, Port Dalhousie		do					•••••		do		750	1		50
do Port Colborne		do					•••••		do	••••	750			50
Overseer, Division No. 1	ļ	do					•••••••		ďο		100			00
do do No. 2		ďο					• • • • • • • • • • • • • • • • • • • •		do	••••		00		00
do do No. 3		do					• • • • • • • • • • • • • • • • • • • •		do .	••••		00		00
do do No. 4	ļ	do					· · · · · · · · · · · · · · · · · · ·		do	••••		00		00
Storekeeper, &c		do							do	••••		.00		00
Messenger, &c		do	•••	Tho	3. J.	Hart	ley	130	days	• • • • •	125	vv	01	50
In charge of steel and iron bridges, also steam pump, &c		do		w	hat	field		1	mont	h	75	00	75	00
		uo	•••	"	<i>-</i> 1440	nord		1	шоше					•
Division No. 1.	l													
Ferryman		do		Fra	ak S	mith		26	days	3	. 140	00	36	3 40
Master, Lock 1	1	do	•••				1		mont	h	42	00	42	3 00
Assistant	1	do	•••						do	•••		00	4	5 00
do		do	. ••						dо	•••		00	4!	5 00
do	ļ	do					ıs		do	•••		00	4	5 00
Master, Bridge 1	1.	do					h		d o	•••	45	00	4	5 00
Assistant		do					·		do	•••	45	00	4	500
Master, Lock 2	1	do					• • • • • • • • • • • • • • • • • • • •		do	•••	47	00	4	7 00
Assistant	4.	do					n		do	•••		00	_	5 00
do	-	do					lon		do			00	_	5 00
do	. :	do					h		do	•••		00		5 00
Master, Lock 3		do					on		do	•••		00	1 -	7 00
Assistant		do					•••••		do	•••		00	_	5 00
do		do					rman		do			00	_	5 00
do		do					ın		do	•••		00	1 -	5 00
Master, Bridge 2		do							do	•••		00		5 00
Assistant		do					r		do	•••		00		5 00
Master, Lock 4		do	••				1		do	•••		7 00	1 -	7 00
Assistant		do	••				ns		do	•••		5 00		5 00
do		ďο							do	••		5 00		5 00
do		ďο										5 00		5 00
Master, Lock 5		ďο					t					7 00		7 00
Assistant		ďο					gton					5 00		5 00
do		ďο	••	. The	mas	Jone	es	[1	. do			5 00		15 00
do	. i	do	••	. Job	n.W	ilde	• • • • • • • • • • • • • • • • • • • •	11	do		.1 43	5 00	1 4	5 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c. - Continued.

Capacity.	When Employ		Names.	Time.	Rate.	Amount.
Division No. 1-Con.					\$ cts.	\$ cts.
Master, Bridge 3	Nov., 1	887	G. H. Brownlee	1 month	45 00	45 00
Assistant	do do	•••	W. Morarity Peter Roxton	1 do	45 00	45 00 47 00
Master, Lock 6 Assistant	do		John Daley		47 00 45 00	45 00
do	do	•••	Chas. Newbold	1 do	45 00	45 00
do	do	•••	W. Rowman		45 00	45 00
Master, Bridge 5	do do	•••	Wm. Elliott		45 00 45 00	45 00 45 00
Assistant Master, Lock 7	do	•••	Geo. Spooner C. B. Hare		47 00	47 00
As sistant	do	•••	M. Sullivan		45 00	45 00
do	do	•••	Wm. Boyle	1 do	45 00	45 00
do		•••	R. Freeman		45 00	45 00
Master, Bridge 6	do	•••	J. W. Grant		45 00	45 00∘ 45 00
Assistant Master, Lock 8	do	•••	Alex Stewart Nich Hayden		45 00 47 00	47 00
Assistant		•••	Wm. Reid.		45 00	45 00
do	do	•••	R. Secord	1 do	45 00	45 00
do		•••	M. McCormick		45 00	24 00
do		•••	Thos. McClelland		45 00 47 00	21 00 47 00
Master, Lock 9 Assistant		•••	R. H. Watson Geo. Mellward		45 00	45 00
do		•••			45 00	45 00
do	do	•••	Alex. Bradt		45 00	45 00
Master, Bridge 8			Jno. Cushman		45 00	45 00
Agsistant			James Whellen		45 00 47 00	45 00 47 00
Master, Lock 10 Assistant	do		Jas. Bradley		45 00	45 00
do	do	•••			45 00	45 00
, do		•••	PP 37 3		45 00	45 00
Master, Bridge 8		•••			45 00	45 00
Assistant	· do	••		la au	45 00	45 00 47 00
Master, Lock 11	do do	. •••	A 7 \$17-2		47 00 45 00	45 00
dő		•••	TITE TO TO 1 . 1		45 00	45 00
do	.l do	••	7 107		45 00	45 00
Master, Lock 12	. do	••			47 00	47 00
Assistant		••	E. Bradley		45 00	45 00 45 00
do do		••	. F. Mugham James McBride		45 00 45 00	45 00
Master, Lock 13		••	Thos. Keating		47 00	47 00
Assistant	do	•	Alex. Soper		45 00	45 00
do	. do	••	Joseph Turner	1 do	45 00	45 00
do	· do	••	. John Lewin	. 1 do	45 60	45 00
Division No. 2.						
Master, Bridge 9			Peter Secord		45 00	45 00
Assistant	· do	••	John Black		45 00 47 00	45 00 47 00
Master, Lock 14	do do	••	. Conl. Nestor		45 00	45 00
do		••	John Strong	1 do	45 00	45 00
do	do		. Thomas Flynn	1 do	45 00	45 00
Master, Lock 15		•	. Thos. Aikens	1 do	47 00	47 00
Assistant		••		1	45 00	45 00 45 00
do			. James Boyle		45 00 45 00	45 00
Master, Lock 16	. do		Thos. Burley		47 00	47 0
Assistant	do		Samuel Bradley		45 00	45 00
do	do		John Holland		45 00	45 0
.do	. do	•	Austin Moran	1 do	45 00	45 00
Master, Lock 17	do		Michael Covety	1. 3.	47 00	47 0
Assistant	. do		F. Shuman	1 do	45 00 45 00	45 00 45 00
do	do do		Michael Glynn Walter Galbraith			45 0

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PAY-LIST in duplicate of Persons employed on the Welland Canal, &c .- Continued.

	-				
Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Division No. 2-Con.				\$ cts.	\$ cts.
Master, Lock 18	Nov., 1887	Jas. H. Pierson	l month	47 09	47 00
Assistant	do	Geo. Newton	1 do	45 00	45 00
do	do	Thos. Hannah		45 00 [45 00
Master, Lock 19.	do	R. Grisdale		45 00 47 00	45 00 47 00
Assistant	do	I. F. Huffman		45 00	45 00
do	do	F. Hoschke		45 00	45 00
Master Tack 20		R. Grenville		45 00	45 00
Master, Lock 20 Assistant	do	Jacob Renter	1 3 . 1	47 00 45 00	47 00
do	do	John Collins		45 00	45 00 45 00
do	do	Thos. Freel		45 00	45 00
Master, Lock 21	do	F. C. Berriman	1 do	47 00	47 00
Assistantdo	do	John Cole		45 00	45 00
do	do	James Ellis Adelbert Clark		45 00 45 00	45 00 45 00
Master, Lock 22	do	Wm. Hannah	1 do	47 00	47 00
Assistant	do	Wm. Camp	1 do	45 00	45 00
do,	do	Wm. Boyle	1 do	45 00	45 00
do	do	Hy. Phillips		45 00	45 00
Assistant	do	Thos. Bonewell Jas. Smerdon	1 40 1	47 00 45 00	10 97 45 0 0
do		T. Cornmarford		45 00 1	45 00
do	do	John Corbett		45 00	45 09
Master, Lock 24	do	R. Campbell		47 00	47 00
Assistantdo	do	M. Henderson		45 00	45 00
do	do	Thomas Bradley Henry Kern	ايدا	45 00 45 00	45 00 45 00
Master, Bridge 10.	do	Wm. Fleming		45 00	45 00
Assistant	do	F. Donahue		45 00	45 00
Master, Lock 25	do	M. McCarthy	1 do	47 00	47 00
Assistantdo	do	Geo. Detlor		45 00	45 00
do	do	Samuel Campbell Robt. Wright		45 00 t	45 00 45 00
Master, Bridge 12	do	Geo. A. Thomas	1 do	45 00	45 00
Assistant	do	Robt. Camp	1 do	45 00	45 00
Master, Guard Lock	do	James Hinton		47 00	47 00
Assistantdo		Sam. Fraser	1 3 1	45 00	45 00
do	do	Fred. Lay	1 3 1	45 00 45 00	45 00 45 00
Master, Bridge 13	do	Richard Higgins		45 00	45 00
Assistant	do	William Upper		45 00	45 00
Division No. 3.					
Master, Bridge 14	do	Dan. O'Leary	1 do	45.00	AR DO
Assistant	do	Geo. A. Upper		45 00 40 00	45 00 40 00
Master, Bridge 15		Bart. O'Leary		45 00	45 00
Assistant	do	Geo. Thompson	1 do	45 00	45 00
Port Robinson Ferrydo Lock	do	R. Stevenson	l do	36 00	36 00
do Lock	do	James McCoppin James Walsh	l do	47 00 45 00	47 00 45 00
Master, Bridge 16	do	James Edmonds		45 00	45 00
Assistant		Geo. P. Misner		45 00	45 00
Division No. 4.					
Welland Lock	de	William Wilson	1 40	45.00	4K 0A
Master, Bridge 17	do	James Foster		45 00 45 00	45 00 45 00
Assistant	do	Luke J. Brennan		45 00	45 00
master, Bridge 19	do	Chas. Hannah	1 do	45 00	45 00
Assistant		Alex. Hannah		45 00	45 00
Humberstone Ferry	do	Michael Trayner Emil Bonabery		36 00 45 00	27 00 45 00
		252	a mavitalisso.	20 00 1	-10 00
		- 624			

PAY-LIST in duplicate of persons employed on the Welland Canal, &c .- Continued.

Сара	acity.	Whe Emplo			N	ames.	•		Ti m e	.	Rat	e.	Amour	1 t.
Division N	70. 4—Con.										\$	cts.	\$	cts
Port Colborne Lo do do do do Ferryman Watchmen—Signatelling safe p	do do do do do do ado assage of vessels	do do do do do		John John John Wm. Jas.	Hen Coo Ste Aik Dun	shaw ok vens. ens lap		1 1 1 1	montl do do do do do do	•••	42 42 42 42 42	00 00 00 00 00 00	42 42 42 42 42 42	00 00 00 00 00
night and day do do do		do do do do	•••	Jam Rob	es N ert S	ixon. Iimps	y on	30 30	d o do	s]	50 50 50 50	45 45	00 00 00 00
connected wi proper order t and day do do	cping machinery th lock gates in hroughout, night do do on No. 2.	do do	•••	Cha	s. Wi	ilson.	on . & w	22	ďo	s		2 00 2 00 1 50	44	00 00 00
connected wi	do do	do do	•••	Tho J. H	mas l . Boo	Ryan oth, l	1. & w	32 25	do do	s		2 00 1 75 1 50 2 00	37	1 00 3 00 7 50 9 00

ACCOUNTS chargeable to Welland Canal-Repairs and Renewals.

D :	ate.	Nature of Work.	Amount.	Total.
1	887.		\$ cts.	\$ cts
Nov.	30	To G. N. W. Telegraph Co., St. Catharines—Telegrams as per original account		24 14
do	15	H. G. Hunt, St. Catharines—Telegram		76
đo	1-30	Henry Mussen, Allauburgh— Telegrams as per original account	1 16 2 18	
do	30	G. N. W. Telegraph Co., Port Colborne—Telegrams as per original account		3 34 14 50
đo	30	Bell Telephone Co., Welland—Messages as per original ac- count		3 50

ACCOUNTS chargeable to Welland Canal-Renewals and Repairs-Continued.

Da	ate.	Nature of Work.	Amount.	Total.
18	87.		\$ cts.	\$ cts.
Nov.	30	Bell Telephone Co., Port Colborne— Messages as per original account	6 85 12 50	-
∘đo	30	Bell Telephone Co., St. Catharines— Messages as per original account	6 40 \$5 00 6 00 35 00	19 35
_		12 do do (drill)	35 00	117 40
do	1–30	The Journal Printing Co., St. Catharines—Advertising list of vessels passing through Welland canal, 136, at 4c.		5 44
∘do	30	Welland Post Office, Welland—Stamps as per original ac-		1 25
do	30	R. A. Abbey, Port Robinson— 17 gallons coal oil, at 30c., \$5.10; ½ gallon machine oil, 40cLamp wick	5 50 0 20	£ WA
do	1–30	John Mathews, Port Colborne— Lamp chimneys, 80c.; matches, 15c	0 95 9 50 10 50	5 70
do	1-30	Wm. L. Garden, Welland— 30 gallons coal oil, at 30c., \$9; 1 box matches, 15c 2 brass brushes, \$1.35; 2 dozen lamp wick, 30c	9 15 1 65 0 50	20 95
do	18	Coy Bros., St. Catharines-184 gallons coal oil, at 26c		11 30 47 84
do	9	Gordon Mackay & Co., Toronto-500 lbs. coke waste, at 9c.		45 00
do Nov. do do do	30 1-30 1-30 1-30	Wm. Hutchinson, Port Dalhousie—1½ tons chestnut coal, at \$7 H. O'Loughlin, St. Catharines—8 tons chestnut coal, at \$7. D. Dettrick do 7 do Richard Leeson, Merriton 8 do William Pike, Thorold— 2,528 lbs. coal, Allanburgh, at \$7		10 50 56 00 49 00 56 00
do	1–30	5,080 do do Grand Trunk Railway Co., St. Catharines—1 month each.	17 78	27 23
·do	1-30	8 Railway Bridge Tenders, St. Catharines and Thorold, \$45 each		360 00
do do do do do do	19 21 21 21 22 23–24 19-24	land, at \$4 R. D. Dunn, Paymaster— Horse and buggy, paymaster, Port Dalhousie do Port Robinson, 1 day Expenses, assistant and horse Railway fare and hack, Welland and return do Port Colborne, Dunnville and return	1 50 2 50 1 00 1 65 3 00	17 14
do	1-30		9 00	18 65
40	2-50	for delivering supplies to and from storehouse		20 00
				934 90

PAY LIST in duplicate of persons employed on the Old Welland Canal and Feeder during the month of December, 1889, to pay permanent establishment, charge-able to Staff and Working Expenses.

Overseer. Lock 1 and Bridge. Assistant	Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Super- annuation
Master, Lock 1 and Bridge do							\$ cts.
Assistant	Overseer	Dec., 1887	J. B. Smyth	I month			6 00
do		do	B. Merritt	12 do			
Assistant		do	D Hargraft	3 00			1 21
Assistant		do	LIohn House	40			1 31
Assistant		uo "	THE IT CL 1	do)	
do	Master, Lock 2 and bridge.		W. H. Charles	4 do	35 00)	1 55
Assistant	Assistant	do .	. John Sullivan	do			1 31
Assistant		do .	.T. Johnson	. do			1 31
Master, Lock 4 and Bridge do		do .	. Wm. McClory	do			1 18
Assistant	Assistant	do .	· Alex Walles	do			1 18
Master, Lock 4 and Bridge. do Jas. Livingstone {	Aggistant	do	Fred Sherer	· 4 00			1 18
Master, Lock 2, 13, 14, 15, Assistant Cock 2, 2 and Bridge Assistant Cock 22 and Bridge Assistant Cock 22 and Bridge Assistant Cock 22 and Bridge Assistant Cock 23, 24, 25, and bridge Assistant Cock 23, 24, 25, and bridge Assistant Cock 23, 24, 25, and bridge Cock 23, 24, 25, and bridge Cock 24, 25, and bridge Cock 24, 25, and bridge Cock 25, 24, 25, 25, 25, 25, 25, 25, 25, 25, 25, 25		40 .	Tied Sheler	1 40		1	}
Assistant	Master, Lock 4 and Bridge.	do.	. Jas. Livingstone			40 00	1 55
Dridge			J. R. Brownlee			1	
Master, Lock 8, 9, 10 and 11 do B. Clarke 1 do 38 00 19 00 1 Assistant do James Cogan 1 do 38 00 19 00 1 Assistant do Martin Nester 1 do 38 00 19 00 1 Assistant do Martin Nester 1 do 38 00 19 00 1 Assistant do B. Darby 4 do 38 00 19 00 1 Master, Lock 19, 20, 21 do E. McLaughlin 4 do 38 00 19 00 1 Assistant do B. McLaughlin 4 do 38 00 38 00 19 00 1 Assistant do J. McNamara 1 do 38 00 38 00 1 Master, Lock 23, 24, 25, and bridge do John Neil 4 do 38 00 19 00 1 Assistant do B. Swazzie do 38 00 19 00 1		do .	. Robert Boyle	1 do			1 31
Assistant	Assistant	do .	Michael White	. do			1 31
Master, Lock 12, 13, 14, 15. do James Cogan 1 do 38 00 38 00 1 38 00 1 Assistant do Martin Nester 2 do 38 00 19 00 1 Assistant do B. Darby do 38 00 19 00 1 Assistant do E. McLaughlin do 38 00 19 00 1 Assistant do R. Serazie do 38 00 19 00 1 Assistant do J. McNamara 1 do 38 00 19 00 1 Assistant do J. McNamara 1 do 38 00 19 00 1 Assistant do John Neil 4 do 38 00 19 00 1 Assistant do John Neil 4 do 38 00 19 00 1 Assistant do Jacch Renter 4 do 38 00 19 00 1 Allanburgh Bridge do	Master, Lock 8, 9, 10 and 11	do .	B Clarke	· 1 do			1 42
Assistant	Assistant						1 18
Master, Lock 16, 17 and 18. do		do .			00.00		1 42
Master, Lock 22 and Bridge do J. McNamara 1 do 38 00 38 00 19 00 1 Assistant do John Neil 42 00 40 00 1 40 00 1 Assistant do R. Swazzie do 38 00 19 00 1 Guard Lock do D. Ryckman do 38 00 19 00 1 Hurst's Bridge do Jacob Renter do 38 00 19 00 1 Allanburgh Bridge do Nelson Higgins do 38 00 19 00 1 Assistant do Lewis Mosier 1 do 38 00 19 00 1 Assistant do A. Higgins do 38 00 38 00 19 00 1 Assistant do John Gearin 1 do 38 00 19 00 0 1 Foreman on banks do John Gearin 1 do 38 00 38 00 19 00 1 Feeder Canal do Geo. Hannah		i do	B Dorby	· 1 do			1 18
Master, Lock 22 and Bridge do J. McNamara 1 do 38 00 38 00 19 00 1 Assistant do John Neil 42 00 40 00 1 40 00 1 Assistant do R. Swazzie do 38 00 19 00 1 Guard Lock do D. Ryckman do 38 00 19 00 1 Hurst's Bridge do Jacob Renter do 38 00 19 00 1 Allanburgh Bridge do Nelson Higgins do 38 00 19 00 1 Assistant do Lewis Mosier 1 do 38 00 19 00 1 Assistant do A. Higgins do 38 00 38 00 19 00 over35 Assistant do John Gearin 1 do 38 00 19 00 over35 Foreman on banks do John Gearin 1 do 38 00 38 00 1 Overseer do <td></td> <td>40 .</td> <td>R Gibson</td> <td>. do</td> <td>30.00</td> <td></td> <td>1 18</td>		40 .	R Gibson	. do	30.00		1 18
Master, Lock 22 and Bridge do J. McNamara 1 do 38 00 38 00 19 00 1 Assistant do John Neil 42 00 40 00 1 40 00 1 Assistant do R. Swazzie do 38 00 19 00 1 Guard Lock do D. Ryckman do 38 00 19 00 1 Hurst's Bridge do Jacob Renter do 38 00 19 00 1 Allanburgh Bridge do Nelson Higgins do 38 00 19 00 1 Assistant do Lewis Mosier 1 do 38 00 19 00 1 Assistant do A. Higgins do 38 00 38 00 19 00 1 Assistant do John Gearin 1 do 38 00 19 00 0 1 Foreman on banks do John Gearin 1 do 38 00 38 00 19 00 1 Feeder Canal do Geo. Hannah		do .	E. McLauchlin	do	20.00		1 18
Master, Lock 22 and Bridge do J. McNamara 1 do 38 00 38 00 19 00 1 Assistant do John Neil 42 00 40 00 1 40 00 1 Assistant do R. Swazzie do 38 00 19 00 1 Guard Lock do D. Ryckman do 38 00 19 00 1 Hurst's Bridge do Jacob Renter do 38 00 19 00 1 Allanburgh Bridge do Nelson Higgins do 38 00 19 00 1 Assistant do Lewis Mosier 1 do 38 00 19 00 1 Assistant do A. Higgins do 38 00 38 00 19 00 1 Assistant do John Gearin 1 do 38 00 19 00 0 1 Foreman on banks do John Gearin 1 do 38 00 38 00 19 00 1 Feeder Canal do Geo. Hannah		do .	Robert Bradley	. i do	1 00 00		1 44
Assistant		do .	J. McNamara	. 1 do		38 00	1 44
Dridge			A. W. Bradley	. do		19 00	1 18
Guard Lock	Master, Lock 23, 24, 25, and bridge			[do	38 00	1)	1 55
Hurst's Bridge		do .	R. Swazzie	• do			1 18
Marlatt's Bridge			D. Kyckman	· do	00.00		1 18
Allanburgh Bridge				11 3.	1 20 00		1 18
do Lock do Wm. Higgins 1 do 38 60 38 00 over 35 Assistant do Lewis Mosier 1 do 38 00 38 00 19 00 over 35 Assistant do A. Higgins do 38 00 19 00 over 35 Assistant do John Gearin 1 do 38 00 19 00 over 35 Foreman on banks do John Gearin 1 do 38 00 38 00 1 Feeder Canal. Overseer do Geo. Hannah 1 do 38 00 38 00 1 Feeder Float Bridge do Jo. Henderson do 38 00 19 00 1 Stromness do Geo. Harris do 38 00 19 00 1 Port Maitland Lock do Michael Corcoran do 38 00 19 00 1 Assistant do Chas. Thrush 1 do 38 00 19 00 0					20 00		1 18
Assistant do			Wm Higgins		1 00 00		
Allanburgh Guard Lock do A. Higgins 1 do 38 00 19 00 over 35 do 38 00 19 00 over 35 do 38 00 19 00 19 00 over 35 do 38 00 19 00 19 00 10 1					1 00 00		1 42
Assistant do John Gearin 1 do 38 00 38 00 1 Feeder Canal. Overseer do John E. Scott. 1 do 800 00 66 66 4 Junction Lock. do Geo. Hannah. 1 do 38 00 38 00 1 Feeder Float Bridge. do John Henderson 1 do 10 00 5 00 Stromness do do Geo. Harris. 2 do 38 00 19 00 1 Port Maitland Lock. do Michael Corcoran 2 do 38 00 19 00 1 Assistant do Wm Brenan 2 do 38 00 19 00 1 Regulating water, &c. do Chas. Thrush 1 do 38 00 38 00 over 38	Allanburgh Guard Lock				90.00		over 35 yr
Foreman on banks		do			20.00	19 00	1
Overseer do John E. Scott 1 do 800 00 66 66 4 Junction Lock do Geo. Hannah 1 do 38 00 38 00 1 Feeder Float Bridge do Jno. Henderson do 10 00 5 00 Stromness do do Geo. Harris do 38 00 19 00 1 Port Maitland Lock do Michael Corcoran do 38 00 19 00 1 Assistant do Chas. Thrush 1 do 38 00 19 00 0 Regulating water, &c. do Chas. Thrush 1 do 38 00 38 00 overst					1 20 00	38 00	1 42
Junction Lock do Geo. Hannah 1 do 38 00 38 00 1 Feeder Float Bridge do Jno. Henderson do 10 00 5 00 1 Stromness do Geo. Harris do 38 00 19 00 1 Port Maitland Lock do Michael Corcoran do 38 00 19 00 1 Assistant do Wm Brenan do 38 00 19 00 1 Regulating water, &c. do Chas. Thrush do 38 00 38 00 over 38	Feeder Canal.		İ				
Junction Lock do Geo. Hannah 1 do 38 00 38 00 1 Feeder Float Bridge do Jno. Henderson do 10 00 5 00 1 Stromness do Geo. Harris do 38 00 19 00 1 Port Maitland Lock do Michael Corcoran do 38 00 19 00 1 Assistant do Wm Brenan do 38 00 19 00 1 Regulating water, &c do Chas. Thrush do 38 00 38 00 over 38	Overseer	ob L	John E. Scott	1 do	. 800 00	66 66	4 00
Feeder Float Bridge					1 20 00	38 00	1 4
Stromness do					. 10 00		
Assistant	Stromness do	l do	Geo. Harris	do	38 00		
Regulating water, &c do Chas. Thrush do 38 00 38 00 over 38			Michael Corcora:	1do	30.00		1 18
isogulating water, committee and the state of the state o			Wm Brenan	do	20.00		1
1000 00	Regulating water, &c	do	Chas. Thrush	ao .) 38 00	38 00	over 35 y
		ļ		1	}	1,202 66	51 2

Accounts chargeable to old Welland Canal and Feeder, Staff and Working Expenses.

Da	ate.	Nature of Work.	Amount.	Total.
18	887.		\$ cts.	\$ cts
Dec. '	7	To John Jenkin & Co., St. Catharines— 14 gals. coal oil	3 50 1 75	5 25
do	17	St. Catharines and Welland Canal Gas Light Co.—Gas supplied old Welland Canal for season 1887—9 lamps as per original account, at 30c.		270 00
đo	31	Dunnville Electric Light Co., Dunnville—Lighting for December, 1887—1 lamp new bridge; 1 lamp guard lock—62 nights, at 162c	'	10 34
đo	31	Dunnville Post Office, Dunnville— Postage stamps for 1887	12 25 1 00	13 25
do do	23 31		ì	15 25
		Use of horse and waggon in connection with duties of overseer—3 months, ending Dec. 31st, 1887, at \$1.50 3 months' house rent, at \$8	37 50 24 00	61 50
do	•••	John S. Scott, Dunnville—Use of horse and waggon in connection with duties of overseer for 3 months, ending Dec. 31st, 1887, as per original account		35 00
				400 37

PAY-LIST in duplicate of Persons employed on the Welland Canal during the month of December, 1887, to pay permanent establishment, chargeable to Staff and Working Expenses.

Capacity.	When Employe	ed	Names.	7	Time.	Rate.	Amount.	Super- annuation
		-		-		\$ cts.	\$ cts	\$ cts
Superintendent					month	2,900 00	241 66	14 50
Paymaster	do	•••	R. D. Dunn	1	do	1,400 00	116 66	7 00
Accountant	do	•••	J. E. Lawrence	L	do	1,000 00	83 34	1
Harbor Master, Port Dal- housie	do		Wm. Cook	1	do	750 00	62 50	2 75
Harbor Master, Port Col-	"	•••		1	uo	100 00	02 50	3 75
borne	do		C. H. Carter	lı	do	750 00	62 50	3 75
Overseer, Division No. 1		•••	J. G. Demare	1	do	100 00	100 00	6 00
do No. 2			James Dell		do	75 00	75 00	
do No. 3 do No. 4	do do	•••	A. Hamilton	1	do	60 00	60 00	3 60
do No. 4 Storekeeper, &c	do	•••	T. R. Secord	ļ.	do	65 00	65 00	1
Messenger, &c			Thos. J. Hartley		do	65 00 1 25	65 00	1 '
In charge of steel and iron	-	•••	I Hos. V. Harricy	131	days	1 40	38 75	
bridges, steam pumps and	i			l			i	1
caisson, &c	do	•••	W. Chatfield	1	month	75 00	75 00	ŀ
								1
Division No. 1.]	ļ
Port Dalhousie Ferryman	do	•••	Frank Smith	27	days	1 40	37 80	
Master, Lock 1	do	•••	J. M. Woodall	1 2		38 00	10.00	1
do	do	•••	do		do	42 00	} 40 00	1 50
Assistant	do		George Howe	‡	do	45 00	22 50	
do	do do		'John Paxton Thos. Williams	1 7	do	45 00	22 50	
Master, Bridge 1	do			1	do do	45 00 45 00	22 50 22 50	
Assistant			Frank Darby Phillip Ohnith	i 🖁	do	45 00	22 50	
Master, Lock 2	do	•••	Alph. Kelley	1	do	45 00	1)	
do		•••	do	Į	do	47 00	46 00	'
Assistant	do		Geo. Bowman		do	45 00	22 50	1
do			Richard Hutton		do	45 00	22 50	t
do			Wm. L. Smith		do	45 00	22 50	
Assistant			Isaac Johnston James Keys		do	47 00	23 50	
do		•••	James Grogan	12	do	45 00 45 00	22 50 6 00	
do		•••	Con. Gorman	138	do	45 00	22 50	
Master, Bridge 2			John Flynn	1	do		22 50	
Assistant			H. Alexander		do		45 00	
Master, Lock 4		•••	Jos. Franklin		do	47 00	23 50	1 .
Assistant		•••			do		22 50	
dodo		•••	Wm. Altoffs Sam Duffin	1 1	do		22 50	
Master, Lock 5			Thomas Scott		do		22 50	
Assistant		•••	John Pennington.	3	do		23 50 22 50	
do			Thomas Jones	13	do		22 50	
do	. do		John Wilde		do		22 50	
Master, Bridge 3			G. H. Brownlee		do		22 50) }
Assistant			M. Morarity		d o		45 00	
Master, Lock 6			Peter Paxton		do		23 50	
Assistantdo		••	John Daley Chas. Newbold	۱۲,	do do		45 00	
do		••	W. Bowman	1	do		22 50	
Master, Bridge 5	. do		Wm. Elliott	. 12	do		45 0	
Assistant	.l do		Geo. Spooner	. []	do			
Master, Lock 7	. do	••	. C. B. Hare	. }	do		23 5	
Assistant	. do		. M. Sullivan.,	.! }	do	45 00	22 5	
do			. Wm. Boyle		do			
Master Bridge 6	. do		R. Freeman		do			
Master, Bridge 6	do do	••	J. W. Grant Alex. Stewart	1	do			
Master, Lock 8	do	••	Nich. Hayden	113	do			
Assistant.	. do	••	W. Reid		do			
do	do		R. Secord		do			
do	do		Thos. McClelland		do	45 00	, 0	- 1

PAY-LIST in duplicate of persons employed on the Welland Canal, &c .- Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Super- annuation
Markey Tools 0	Dag 1007	D II WALLE	1	\$ cts.	\$ cts.	\$ cts.
Master, Lock 9do	do	R. H. Watson	month	47 00 45 00	46 00	
Assistant	do	C 377 34111 3		45 00	22 50	
do		Jos. C Longley	₹ do	45 00	22 50	İ
_ do		Alex. Bradt	do	45 00	22 50	j
Master, Bridge 7		Jas. Whitter	½ do	45 00	22 50	
Assistant Master, Lock 10		John Cushman Jas. Bradly	½ do	45 00 47 00	22 50	
do	do	do	do	45 00	46 00	1 75
Assistant	do	Jas. Mulvey		45 00	22 50	ĺ
do		Henry Hare		45 00	22 50	1 41
_ do	do	Thos. Nelson	1 do	45 00	22 50	1 41
laster, Bridge 8		Geo. R. Boyle		45 00	45 00	
Assistant	do	John McGeachie	do	45 00	22 50	
Master, Lock 11		Jas. Reynolds Alex. Wilson	do	47 00 45 00	23 50	1 41
do	do	W. P. Burleigh	do	45 00	22 50 22 50	1 41
do		Jas. Webster	do	45 00	22 50	
faster, Lock 12		Wm. Strong	do	45 00)	
do	do	d o		47 00	} 46 00	1 75
Assistant	do	E. Bradly	1 do	45 00	22 50	l
do		F. Meighan	₫ do	45 00	22 50	
do		Jas. McBride	do	45 00	22 50	
laster, Lock 13		Thos. Keating	do	45 00 47 00	46 00	
ssistant	do	1 A 1 Cl	do	45 0 0	22 50	Ì
do	do	Joseph Turner	do	45 00	22 50	j
do		John Lewin	🧃 do	45 00	22 50	
Division No. 2.						
Master, Bridge 9	do	Peter Secord	do	45 00	22 50	
Assistant	do		do	45 00	22 50	·
laster, Lock 14	ďo		do	47 00	23 50	
ssistant		Robert Boyle	do	45 00	22 50	
do	d o do	John Strong Thos. Flynn	do	45 00	22 50	1 41
laster, Lock 15		Thos. Aikens	do	45 00 47 00	22 50 23 5 0	1 41
Assistant		James McAuley	do	45 00	22 50	1 41
do		James Boyle	do	45 00	22 50	
_ do		W. J. Wilson	do	45 00	22 50	
laster, Lock 16		Thos. Burley	do	47 00	23 50	
do	do	Sam. Bradly John Holland	1 do	45 00	22 50	ŀ
do	do	1 4	l do	45 00 4 5 00	45 00 22 50	0-0-25
faster, Lock 17		Mich Coody	do	47 00	23 50	Over 35 ya
ssistant	do	F. Shuman	do	45 00	22 50	
do	do	Mich. Glynn	½ do	45 00	22 50	
_ do		W. Galbraith	do	45 00	22 50	
laster, Lock 18		J. H. Pearson	1 do	47 00	23 50	
Assistantdo		Geo. Newton	do	45 00	22 50	
do	do do	Thos. Hannah Jos. Cook	do	45 00	22 50	
laster, Lock 19	do	R. Grisdale	do	45 00 47 00	22 50 23 50	1
ssistant	do	41 7		45 00	22 50	
do		F. Hoschke		45 00	22 50	
''-'qo	do	R. Grenville	do	45 00	22 50	
laster, Lock 20		Jacob Renter	1 do	47 00	} 46 00	
do	do	do	₹ do	45 00)	}
Assistantdo		J. F. Huffman	do	45 00	22 50	,
do	do	John Collins	do	45 00 45 00	22 50 22 50	1 41
faster, Lock 21		F. C. Berriman		47 00	22 50 23 50	1 41
Assistant		John Cole		45 00	22 50	I
						1
dodo	do	James Ellis	🔒 do	45 00	22 50	i

PAY-LIST in duplicate of persons employed on the Welland Canal, &c .- Continued.

		1. 7			,	
Capacity.	When Employed	Names.	Time.	Rate.	Amount.	Superan- nuation.
Division No. 2Con				\$ cts.	\$ cts.	\$ cte.
Master, Lock 22	Dec., 1887	Wm. Hannah	½ month	47 00	23 50	
Assistant	do	Wm. Camp	1 do	45 00	22 50	
do	do	Henry Phillips Wm. Boyle	do	45 00 45 00	22 50 22 50	
Master, Lock 23	do	T. Bonewell	½ do	45 00)	
do	do	do Jas. Smerdon	do	47 00	} 46 00	
do	do	T. Commarford	do	45 00 45 00	22 50 22 50	1 41
do	do	John Corbett	½ do	45 00	22 50	1 41
Master, Lock 24do	do	R. Campbell	do	45 00 47 00	46 00	
Assistant		M. Henderson	do	45 00	22 50	
do		Thos. Bradley	do	45 00	22 50	
Master, Bridge 10	do	Wm. Fleming	do	45 07 45 00	22 50 22 50	
Assistant	do	F. Donahue.	do	45 00	22 50	
Master, Lock 25	1 1	M. McCarthy	do	45 00	} 46 00	1 75
do	do	do Geo. Detlor	do	47 00 45 00	22 50	- 10
, đ o	do	Sam Campbell	1 do	45 00	45 00	
Master, Bridge 12		Robert Wright		45 00	22 50	
Assistant		Geo. A. Thomas Robert Camp	do	45 00 45 00	$\begin{array}{ccc} 22 & 50 \\ 22 & 50 \end{array}$	
Master, Guard Lock	do	James Winton	do	47 00	23 50	
Assistantdo	do	Fred Lay Samuel Fraser	do	45 00 45 00	22 50	1 41
do		James Cook	do	45 00 45 00	$\begin{array}{c} 22 \ 50 \\ 22 \ 50 \end{array}$	
Master, Bridge 13	do	Richard Higgins	do	45 00	22 50	1 41
Assistant	do	Wm. Upper	₫ do	45 00	22 50	
Division No. 3.						
Master, Bridge 14	do	Daniel O'Leary	1 do	45 00	22 50	1 41
Assistant	do	Geo. A. Upper	do	40 00	20 00	
Master, Bridge 15 Assistant		Bart. O'Leary George Thompson	do	45 00 45 00	$\begin{array}{cccc} 22 & 50 \\ 22 & 50 \end{array}$	1 41
Port Robinson Ferry		R. Stevenson		36 00	22 80	1 41
Port Robinson Lock	do	Jas. McCoppin	month.	47 00	23 50	1 47
Assistant Master, Bridge 16	do	James Walsh James Edmonds	do	45 00 45 00	22 50 22 50	1 41 1 41
Assistant		Geo. P. Misner		45 00	22 50	1 41
Division No. 4.						
Master, Welland Lock	do	Wm. Wilson	1 do	45 00	22 50	
do Bridge 17 Assistant		James Foster Luke J. Brenen	l do	45 00 45 00	45 00 22 50	1 69
Master, Bridge 19	do	Chas. Hannah	₹ do	45 00	22 50	1 41
Assistant	do	Alex. Hannah	do	45 00	22 50	1 41
Humberstone Ferry Master, Bridge 21		Michael Trayner Emil Boneberg	do do	36 00 45 00	18 00 22 50	1 41
Assistant		Isaac Shisler	do	45 00	22 50	1 71
Port Colborne Lock and	do	John Henshaw	1 4-	40.00	,	
Bridge do do	do	do '	do	42 00 38 00	40 00	1 55
do do	do	John Cooke	🦸 do	42 00	21 00	1 31
do do do do		John Stevens Wm. Aikens		42 00	21 00	1 31
do do		J. Dunlop		42 00 42 00	21 00 21 00	1 31
Port Colborne Ferry	l do	John Bradley	do	42 00	21 00	
Assistant Ferryman	ı do	John Bradley, jun	do!	42 00	21 00	
304-112		259				

PAY-LIST in duplicate of persons employed on the Welland Canal-Continued.

Capacity.	When Employed	Names.	Time. Date.		Amount.	Super- annuation
AQUEDUCT. Signalling and controlling safe passage of vessels through Aqueduct at Welland	do do do	Jos. McMurray James Nixon Robt. Simpson Wm. Nixon	3 days 3 do 3 do 3 do	\$ cts. 1 50 1 50 1 50 1 50	\$ cts. 4 50 4 50 4 50 4 50 4 50	\$ cts.
Divisions Nos. 1 and 2. Keeping machinery connected with lock gates and waste weirs in proper order throughout do do do do do do do do Diver	do do do do		13 do 14 do 13 do 13 do	2 00 2 00 1 50 2 00 1 75 2 00	39 00 26 00 21 00 26 00 22 75 26 00 5,070 76	92 17

Accounts chargeable to Welland Canal, Staff and Working Expenses.

*				
D	ate.	Nature of Work.	Amount.	Total.
1	887.		\$ cts.	\$ cts.
Dec.	1-31	To G. N. W. Telegraph Co., St. Catharines-Telegrams as		
do	1-31	per original account		8 52
do	1-31	original account		1 73 1 20
do	7	3 gallons coal oil		
Dec.	12 }	Telegrams as per original account	1 92	2 82
do do	31 1–31	John Cloy, Lock 25, New Canal—Telephone messages Bell Telephone Co., Welland—Messages as per original		1'50
do	31	st. Catharines Post Office, St. Catharines—Post office box		1 20
do	31	rent, July 1, 1888 L. G. Carter, P. M., Port Colborne—Postage stamps, &c.,		4 50
do	6	as per original account	••••••	2,81
do	3	Canals		3 30
đo	*	closing of canais		4 00
αo	31	G. H. Burgar, Welland—12 months' rent of room for the paymaster, Welland Canal, 50c		6′00
Sept. Oet. Dec.	10 28 23	John Jenkin & Co., St. Catharines— 1 gross lamp wick. 4 dozen long chimneys, \$6; 2 dozen medium, \$2.40 3 leader lamp chimneys.	70 8 40 45	
Nov.	30	W. N. Gardner, Welland, 1 box matches, 15c.; 3 gallons		9 55
Dec.	1	coal oil, 90c	l	1 05
	31	St. Catharines Water Commissioners, St. Catharines—4 quarters water, paid, Dec. 31, 1886		21 00
do	17	St. Catharines and Welland Canal Gas Light Co— Balance on contract for new canal, gas supplied for		
do	1	season, 1887	5,000 00	
		\$2.50.	63 50	5,063 50
Dec.	28	Henry O'Loughlin, St. Catharines—1 ton nut coal Wm. Hutchison, Port Dalhousie—		7 00
Nov. Dec.	29 1–31	1 ton soft coal	4 75 21 00	25 75
do :	13-23	Wm. Pike, Thorold—4,885 lbs. hard coal, at \$7		17 09
do	1-31	John Matthews, Port Colborne—1 ton coal	l l	3 25
do	31	in charge of aqueduct at Welland		11 44
_	1	J.G Duncan, Overseer Division No. 1, Port Dalhousie—		180 00
·do	31	Use of horse and waggon in connection with duties of overseer, three months ending Dec. 31, 1887, at \$150 Postage for 1 year	37 50 6 06	
	į	James Dell, Overseer Division No. 2, Thorold-		43 56
do	31	Use of horse and waggon in connection with duties of overseer, 3 months ending Dec. 31, 1887, at \$150	37 50	
		3 months' house rent, at \$3	24 00	61 50
·do	31	3 months' house rent, at \$8	24 00	31.50
	i	Horse and waggon delivering coal oil, 1887 Paid freight on paint from Thoroid	30 00 0 35	
		Paid postage 3 months, 42c.; P. O. box, \$1 Railway fares 3 months	1 42 1 55	
	ı	261		57 32

Accounts chargeable to Welland Canal, Staff and Working Expenses.

D	ate.	Nature of Works.	Amount.	Total.
. 1	887.		\$ cts.	\$ cts.
Dec.	31	Thos. R. Secord, Overseer, Division 4, St. Catharines— Railway fares as follows, for 3 months ending December 31, 1887:— 3 railway fares, St. Catharines and return. \$1.20	3 60	
		43 do Welland do 4.50	19 35 7 50 1 00	31 45
do	31	W. W. Wait, St. Catharines—Services of horse and wagon delivering supplies to and from store house		20 00
do	21	John Cook, Port Colborne—Reporting vessels and light- erages at elevator, during season 1887		20 00
do	31	M. A. Harpley, St. Catharines—Services for 3 months, ending December 31, 1887, as charwoman, Welland		20 00
do	31	Canal Office, at \$100 per annum	2 00 4 40	25 00 · 6 40
đo	19	ment of Welland Canal pay rolls, November, 1887:— Horse and buggy 1 day up canal	2 50	
₫o	21	Expenses, assistant and horse	1 00 1 55	
đo	19–23	return	3 0 0 9 00	
đo	31	William Ellis, Superintendent, St. Catharines— Allowance for quarter, ending December 31, 1887 Sundry telegrams sent and received during the quarter.	75 00 6 20	17 05 81 20
				5,743 69

PAY-LIST in duplicate of persons employed on the Welland Canals during the season of Navigation, to pay season allowances, chargeable to Staff and Working Expenses.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Checking passes and keeping record of vessels passing thro	Season of Navigati'n			PerSeason \$ cts.	\$ cts.
and timing tugs and steamers from Lock 7 to 8do do Timing tugs and steamers, Lock	do	C. B. Hare Wm. Doyle			60 00 40 0 0
8 to 7, do do	do	N. S. Hayden R Secord	8 do		25 00 20 00 25 00
Timing tugs and steamers, Lock 25 do do Timing tugs and steamers, Port	do	W. McCarthy Sam. Campbell	8 do		20 00
Colbornedo do		John Henshaw John Cook			30 00 30 00
Old Welland Canal. Checking passes and keeping record of vessels passing thro	d o	P. Mouritt	Q 40	30 00	30 00
Lock 1, and timing tugs, &c do do do Lock 25 do do	do	B. Merritt	8 do 6 do	15 00 20 00	15 00 15 00 5 00
					315 00

REPAIRS FROM 1st JULY, 1887, TO 31st DECEMBER, 1887.

PAY-LIST in duplicate of persons employed on the Dunnville Division of the Welland Canal, during the month of July, 1887, to repair the west pier at Port Maitland, chargeable to Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Carpenter	do do do do do	James Edgar	19 do 23 do 18½ do 3 do 3 do	1 50 1 50 1 50 1 50	\$ cts. 50 00 28 50 34 50 27 75 4 50 4 50 7 50

ACCOUNTS Chargeable to Welland Canal Construction.

James Rolston M. A. Smith A. McDonald	
	2,872 41

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of July, 1887, to pay for building store shed. Port Dalhousie, driving piles and building tug dock, Port Colborne, re-building lock gates, repairing tanks, cleaning out ditches and culverts, also cutting thistles, &c., chargeable to Renewals and Repairs.

and nopairs.	,				
Capacity.	When Employed	Names.	Time.	Rate.	Amount.
·				\$ cts.	\$ cts.
Foreman, carpenter	July, 188'	H. Vanderburgh	1 month	75 00	75 00
Carpenter	1 ao	. Jas. Hindson	26 davs	2 00	52 00
dodo	ao	Wm. Patterson	25\ do	2 00	50 50
dodo	do			2 00	50 00
do	do	In	12 do	2 00 2 00	24 00 7 0 0
Handy man	do	John Doig	1234 do	1 75	41 13
do		Robert Johnston	24 do	1 75	42 00
Painter Laborer	,	A. Impey	00 1	2 00	42 00
do		R. Houston Geo. Irving	22 do 241 do	1 50 1 50	33 00 36 75
Team		Joseph Johnston	23 do	3 50	82 25
Watchman	do	Oscar Sharp	31 do	1 50	46 50
do	do	John McMillan	31 do	1 20	37 20
Division 1.					
Laborer	do	I Raynard foreman	24 40	2 00	
do		J. Reynard, foreman Jos. Andrews		1 50	48 00 29 63
do	do	Ed Crosby	16 do	1 50	24 00
do	do	Cob. Longley	21 do	1 50	31 50
dodo	uo	io. Cushman	172 do	1 50	26 63
do		Thos Kelley	17 do	1 50	25 50
do		J. Stiven	17 do 22 do	1 50 1 50	16 50 33 00
do		Thos. Hayden		1 50	28 50
do		Peter Patterson	5 do	1 50	7 50
Division 2.					
Laborer	١,,	G. B. H.			
do	do	Geo. Putland Wm. Wells	103.	1 50 1 50	9 00
do		Hiram Dell		1 50	9 00 24 09
do	do	Thos. Donahue	9 do	1 50	13 50
do	do	. Wm. Clark	6 do	1 50	9 00
do		Michael Nestor		1 50	27 00
	uo	.'J. H. Booth	26 do	1 50	39 00
Division No. 3.					
Laborer	do	G. A.Jordan,foreman	25 do	2 00	50 00
do	do		241 do	1 50	36 75
dodo	do	John Madigan	24½ do	1 50	36 75
do	1	Geo. Brown	23½ do	1 50	35 25
do	40	Benj. Redfern	1001 3-	1 50 1 50	36 75
do	do	Levi Wilson		1 50	35 25 34 88
do	do	. Wm. J. Abbey	221 do	1 50	33 75
do	do	A. McIntosh	23 do	0 75	17 25
Divisions Nos. 3 and 4.					· -
Laborer	do	J. Clancey, foreman	26 do	2 00	52 00
do	do	. Hugh Bailey	26 do	1 50	39 00
dodo	do	.¦M. Blake	26 do	1 50	39 0 0
dodo	do	J. Waldron	12 do	1 50	18 0 0
do	do	Thos. Nolan	12 do	1 50	18 0 0
do	,	Wm. Pew L. Barnes, watchboy.		1 50 9 75	39 00 9 00
	••	264	-= 40	0.5	8 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c. - Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount
Division No. 4.				\$ cts.	\$ ct
Sarpenter		F.T. Walton, foreman		2 75	72 8
go		S. R. Bradley		2 00	49 00
do		D. S. Walton		2 00	50 00
do		Ed. Smith		2 00	50 00 49 00
do	do	Wm. Dunn		2 00	52 00
do	do	S. J. Hill L. Chase		2 00	38 00
do	do	J. Chase		2 00	38 00
do	do	G. Chase		2 00	38 00
do	do	J. Miller		2 00	38 0
aborer	do	F. Shuman		1 75	42 00
do	do	Wm. Bradley		1 50	28 5
do	do	G. B. Jordan		1 50	34 50
do	do	Geo Mathews		1 50	30 00
[orse and waggon		H. Cook		2 00	3:0
eam	do	Saml. Cook		3 50	49 0
forse and waggon	do	F. T. Walton	1 do	1 50	1.5
arpenter	do	Wm. Tinlin, foreman.		2 00	41 7
do	do		15 do	2 25)
lelpers, &c	do	Alf. Tinlin		1 50	21 0
do	do	John Weaver	1	1 50	1 5 1 5
do	do			1 50	1 5
do	do	do horse		1 50 2 00	52 O
aborer do	do	Wm. Cook, foreman Jacob Cook		1 50	39 0
do	do	YYT Y 1		1 50	36 0
do	do	C1 TT		1 50	33 7
do	do	John Hardeson		1 50	23 2
do		Jas. Leslie		1 50	34 5
do		E. Bradley		1 50	3 0
do	do			1 50	3 0
do	do	Geo. Julian	26 do	1 50	39 0
Watchman	do	John Hanley	30 do	1 00	30 0
		Old Welland and Feeder Canal.			
Jarpenter		N. Morey, foreman		2 75	75 6
d o		P. Shortell		2 00	51 0
do	do	S. Radcliffe	27½ do	2 00	55 (
do	ao	T. Rapsey	26 do	2 00	52 (31 (
Vatchman		J. W. Boyle		1 00 3 50	88
Ceam	do	Chas. Hill Thos. O'Neil, foreman		2 00	58
do	do			1 50	37 !
do		W. Chandler		1 50	39 (
do	do			1 50	1 39 (
do		Rich. Grant		1 00	31 (
do	do	Wm. Assell	15] do	1 25	19 3
uarryman	do	J. Hamilton, foreman	26 d o	2 00	52
do	do	Arthur Bradley	23½ do	. 1 50	35
do	αο	Jas. Taxwell	.125 do	1 50	37
do	do	Jerry Langhey	244 do	1 50	36 36
do	1 -	Jno. Brenan		1 50	11
do		Abr. Bradley		1 50 1 50	32
dodo		Jno. Dundees		1 50	33
Peam		Chas. Tenbrook		3 50	64
aborer	do	Arthur Bradley			37
do	do	Wm. Clarke		1	37
do		Pat. Griffin		1	37
do		James Ward		1	39
do		Ed. Elliott		1 50	13 !
-do		P. Morgan		0 77	19

PAY-LIST in duplicate of persons employed on the Welland Canal, &c.—Continued.

Division No. 4—Concluded. 1887.	Rate.	Amount.
Watchman do Geo. Wilson 26 do do do Wm. Chelews 8 do	1 50 1 25 1 25 1 25 1 25 1 25 3 00 2 50 2 50 1 25 1 25 1 25 1 25 1 25 1 25 1 25 1 25	\$ cts. 37 50 36 00 31 25 31 25 30 00 33 00 36 00 45 00 5 00 22 50 18 75 15 00 7 50 7 50 7 50 9 00 12 00

Accounts chargeable to Welland Canal, Repairs.

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts
July 1-31	To Coy Bros., St. Catharines-		
*	6 scythes, at 75c., \$4.50; 6 snaths, at 75c., \$4.50	9 00 15 20	
	doz. picks, \$6; ½ doz. pick handles, \$1.50	7 50	
	3 ship augers, \$5.25; 1 gallon molasses, 30c	5 55 1 60	
	500 lbs. axle grease, at 7c., \$35; 100 lbs. white lead, \$7.50	42 50	
,	4 oval brushes, at \$1.25, \$5; 2 sash brushes, at 20c.,	5 40	
	1 painter's duster, 75c.; 4 galls. turpentine, at 75c., \$3	3 75	
	1 gallon light dryer, \$1.10; 1 pkg. twine, \$1.25	2 35	
	1 doz. scythe stones, 60c; 15 sheet line, at 10c., \$1.50 1 paper clout nails, at 15c.; 3 kegs 10 in. nails, \$3.50,	2 10	
	\$10.50	10 65	
	2 kegs 12 in. nails, \$7; 1 keg 8 in. nails, \$3.75	10 75 23 75	
•	2 lbs. twine, \$1; 8 lbs. back staples, at 7c., 56c	1 56	141.00
Inly 1_31	To James Wilson, Thorold—		141 66
	6 brooms, at 30c., \$1.80; 24 scythe stones, at 10c., \$2.40	4 20	
	1 doz. files, \$1.50; 28 lbs. oatmeal, \$1	$\begin{bmatrix} 2 & 50 \\ 2 & 50 \end{bmatrix}$	
	3 loaves bread, 33c.; 2 doz. eggs, 36c	0 69	
	17 ball Peen hammers, at 80c	13 60 5 04	
	1 Reg o in spines 112 ins., at 170		28 53
Funo 1 20	. To R. A. Abbey, Port Robinson—		
Func 1-20	14 lbs. oatmeal, 50c; paid freight on 2 bales oakum, 35c.	0 85	
July 2-31	3 scythes, at \$1, \$3; 6 scythe stones, 50c	3 50	
. * [™]	grease, 30c	1 80	
	4 cans salmon, 80c.; 2 lbs. cheese, 33c.; 2 lbs. sugar,	1 39	
	For carpenters working at Quaker Bridge.		7 54
J uly 1-31	To Wm. N. Garden, Welland		
	12 lbs. catmeal, 50c.; 1 broom, 25c.; 1 scythe, \$1 1 scythe stone, 10c.; 1 hand axe, \$1.38; paid for, 30c	1 75 1 75	
			3 53
July 4-31	To John Mathews, Port Colborne— 3 scythe stones, 30c.; 1 padlock, 35c	0 65	9.1
	3 lbs. manilla roye, 36c.; 1 chirel handle, 8c		
Tul- 0 00	1 cringle, 10c.; 2 doz. carriage bolts, \$1	1 10 0 50	
July 8-28.	1 jinnings bit		
	100 lbs. spikes, \$4.50; 137½ lbs. manilla rope, at 12c.,		
July 2-29.	\$16.50	21 00	
	23 loaves bread. \$1.38	3 33	
	1 pair towels, 25c.; 6 doz. eggs, at 15c., 90c; 46½ lbs. meat, at 10c., \$4.65	5 80	
	21 bush. potatoes, \$2.20; 25 lbs. oatmeal, at 4c., \$1	3 20	
	l box biscuits, 25c.; 4 quarts cherries, at 6c., 24c.; 1 oil can, 50c	0 99	
	1 gallon coal oil, 30c; 1 pkg. beans, 15c.; onions, 44c.	0 89	
	5½ lbs. butter, at 20c., \$1.10	1 10	42 6
T	To George Lloyd, St. Catharines-		
January 3. May 6-30.	3 lbs. hemp packing, at 40c	1 20 0 35	
, 0-00,	Cutting thread on iron pipe, 30c.; repairing oilers, 30c.	. 0 60	
	l galvanized rose for feed pipe, 25c.; repairing galvan-	1	
	Cutting thread on iron pipe, 30c.; repairing oilers, 30c.	0 60	

Accounts chargeable to Welland Canal, Repairs-Continued.

Date.	Nature of Work.	Amount.	Total.
1887.	To George Lloyd, St. Catharines-	\$ cts.	\$ cts.
June 2-25	Repairing oil cans, 10c.; 1 1½-inch tie, 25c.; 2 1½-inch bushings, 40c	0 75 8 00 1 10 2 70 1 15 0 29	
July 9 April 9 July 6 do 20	A. McIudoe, Thorold— Repairing 1 double block, 1 patent sheave, 6 in, by 14	1 50 0 75	16 89 1 60
đ o 6	Making 2 handles for large rakes J. & J. Taylor, Toronto— 2 set vault doors, as per order, for collector, Canal Tolls Office, Port Colborne	130 00	3 00
May 20	Packing C. P. Mills, St. Catharines—	1 00 1 00	132 00 2 00
. J aly 1	J. & R. Miller, Agts. for J. S. Mindar, Port Dalhousie— 1 8 by 13 single cylinder patent friction drum hoisting engine, with winch and 38-foot boiler and fixtures complete, F.O.B	900 00 23 40	923 40
do 1-31	James Wilson, Merritton— 2,704 lbs. castings, at 3½c	94 64 41 10 64 00	199 74
∙ do 1–31	James Wilson, Merritton— 93 lbs. rods repaired, at 1½c	6 16 119 27 348 55 7 55 39 32 8 80 1 00	536 05
June 1-30 July 1-31	9,645 ft. pine, at \$16, \$154.32; 3,889 ft. pine, at \$17, \$66.11 8,000 do \$20, \$160; 1,950 do \$35, \$68.25 3,277 ft oak, at \$25, \$81.92; 1,920 ft. oak, at \$27, \$51 84 26½ ft. 1½-inch blinds, at 5c	1 44 220 43 228 25 50 70 9 19	
	\$192	193 50	2,286 00

Accounts chargeable to Welland Canal, Repairs-Continued.

Date.	Nature of Work.	Amount.	Total.
1887. July 16-31 do 1-31	Robert Foster, St. Catharines— 14 days horse and waggon for W. Chatfield, in charge of iron and steel bridges 16 days horse and buggy, for Superintendent, at \$2.50 3 do do 1.50	\$ cts. 35 00 40 00 4 50	\$ cts.
do 1-31	H. Vanderburgh, Allanburgh-21 railway tares to Port		79 50
do 22 do 25–27 do 26	Dalhousie and return, at 70c	1 25 4 75	14 70
May 2-26 June 1-30 July 1-31	Charles Loesch, Welland— 14 meals, \$3.50; horse feed, 50c	4 00 3 20 7 55	16 00 14 75
May 17 to June 29	F. T. Walton, foreman, Thorold— 7 railway fares, Merritton to Port Colborne, at \$1	0 70	
July 1–31	Thomas Hastings, contractor, St. Catharines— 12 cut stone column blocks, delivered at Port Dalhousie, 22 x 22 x 12, at \$5 1 day mason setting same	60 00 3 50 5 00 3 05 5 60 1 50	52 30
	1 day horse and waggon		92 90
do 8-30	Freight, as per original account and you hers attached Dickinson & Sness, Humberstone— Advance on account of construction of Canal, Toll Collector's and Custom House at Port Colborne, as		3 94
	per agreements I certify that sufficient work and material have been completed and delivered to entitle the above firm to the amount of the above account. Old Welland Canal and Feeder.		1,500 00
July 2-30	To James Wilson, Thorold— 2 padlocks at 40c., 80c.; 20 lbs. chain at 8c., \$1.60 32 lbs. manilla rope at 14c., \$4.48; 20 lbs. heaving line at 14c., \$2.80	7 28	
· 	1 padlock at 50c; 2 ship augers, \$2.50 896 lbs wrought spike at 4½c	3 00 40 32	53 00

Accounts chargeable to Welland Canal-Repairs-Continued.

D	ate.	Nature of Work.	Amount.	Total.
	-	·	\$ ets.	\$ cts.
July	1-27	James Rolston, Dunnville— 1 gross screws $\frac{3}{8}$, 20c.; 6 glass 8x10, 24c; 1 glass 10x12, 6c.	0 50	
		3 lbs. putty at 5c., 15c.; 59 lbs. wrought spikes at 5c., \$7.95; 2 glass 24x36, 88c	8 98	
		1 file, 20c.; 1 scythe, \$1.25; 1 stone, 10c; 6 8in files, \$1.20; doz. bolts, 15c	2 90	
		lock, 25c 4 ship augers, 13x16, \$3.75; 1 pad-	4 15	
		Hasp, 10c.; hinges, 15c.; nails, 5c.; 1 axe handle, 20c.; 43 Boston line, \$6.45	6 95	
		1 keg steel spikes, \$3; 1½ 30c.; 1 framing saw, \$2 2 axe handles, 40c.; 27½ lbs. putty at 4c, \$1.30; 1 bottle	5 30	
		oil, 25c.; 3 files, 30c	2 05	
		wire, 10c	1 25	
		\$2 2 pick helves, 50c.; 2 shovels, \$2; 1 file, 15c.; 1 double	2 70	
		shovel, \$1	3 65	38 43
do	1-31	Condon & Hall, Dunnville— 1½ lbs. ultra-marine blue, 38c.; ½ gal. turpentine, 40c.; 1		
		doz. pull hooks, 30c	1 08 1 39	
		109 lbs. manilla rope, at 12c., \$20.28; 74 lbs. marline, 43c; 2 augers, \$1	22 71	
		1 ship axe, \$1.75; 1 ship axe, \$2.50; 1423 lbs. wrought spikes, \$6.42	10 67	
		Whitening and glue, \$1.55; 1 hammer, \$1; 142 lbs. pitch, \$4.25; twine, 25c	7 05	
do	1-31	W. Swartz, Dunnville—		42 93
		112 lbs. T bolts, dogs and hooks, at 7c	7 84	
		at 35c., \$2.80	4 80	
		80c	4 80 1 40	
		and plates, at 75c., \$1.50; 12 lbs. spike drawers,	_ 1	
		25 tongs repaired, at 3c., 75c.; 1 sledge faced, 25c Sharpening 2 picks, 10c.; 20 bands made, at 2c., 40c	1 98	
		4 dogs for pile driver repaired, at 50c.	2 00	24 32
Inna	1-30	James Wilson, Merritton—		24 32
J une	1-30	89 rods repaired, at lc., 89c; 427 levers repaired, \$8.54 1,680 screw bolts repaired, at 2½c., \$42; 28 rag bolts, at	9 43	
		3c., 84c	42 84	
		203 drills and picks pointed at 4c \$18.68; 2,074 screw	8 12	
	ļ	bolts, at 5c., \$103 70	122 38 9 30	
		3 augers shanked, at 50c., \$1.50; 76 hours time, at 40c. \$30.40	31 90	
July	1-31	209 rods r-paired, at 1½, \$3.14; 646 lbs. plates repaired and straightened, at 2c., \$12.32	16 06	
		481 screw bolts repaired, at 2½c., \$12.02; 247 rag bolts, at 3c., \$7.41.	19 43	
		306 lbs. new plates, at 4c., \$12.24; 2,036 lbs new screw bolts, at 5c., \$101.80	114 04	
	j.	104 lbs. steeling, at 6c., \$6.24; 51 lbs. new steel, at 20c., \$10.20	16 44	
	l	Splicing auger	.0 50	390 44

ACCOUNTS chargeable to Welland Canal-Repairs -- Continued

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts.
July 1-31	James Wilson, Merritton— 351 lbs. castings, at 3½c., \$12 29; 105 hours drilling, boring, etc., 40c., \$42 2 new valves complete, at \$58	54 29 116 00	170 29
do 2-31			
do 30	F. Lathmore, Dunnville—100 tamarac poles, at 5c		1,683 40 5 00
do 1–31	McUleary & McLean, Thorold— 2,180 feet pine, at \$13.50 per M, \$29.43; 1,748 feet pine, at \$16 per M, \$27.97. 281 feet pine, at \$17.50 per M, \$4.92; 200 feet pine, at \$25 per M, \$5.37. 5,307 feet oak, at \$25 per M, \$132.68; 2,400 feet oak, at \$27, \$60.80. 650 feet elm, at \$17 per M.	57 00 10 29	
May 2 3 3 4 do 6-8	Chas. Henderson, Marshville—44 meals, at 25c., \$11; horse feed, \$6.50		276 22 17 50 8 00
	(Above for men away from home removing logs out of Canal channel.)		8,781 19

PAY-LIST in duplicate of Persons employed on the Dunnville Division of the Welland Canal during the month of August, 1887, to Repair the West Pier at Port Maitland, chargeable to Repairs.

Capa	icity.		Wh Emple			Na	mes.		1	ľime.		Rate	e.	Amou	nt.
Foreman on pier Carpenters frami	ng cross ties a	and	Aug.,	1887	Jas.	Edga	ır		26	days			cts. 00		cts.
12 x 12 side tir same in work do		ıng	do do				chell inks			do do		1 1	50 50		00
do do	1 .		do do		John	Tayl	orline		26	do .		1	50 50		00
do Boring and bol		new	do	•••	Step	ien V	Vilds		27	do .	- 1	1	50		50
timber, &c do	do .	••••	do do	•••	Davi	d Co	oper		7	do .		1	50 50	10	50 50
do Foreman on ston	e scow		do do				ee ısh		6 3	do . do		1 1	50 50		00 50
Laborers loading at Port Colbo	rne and unlo	ad-	3.			aD am	1.7	ļ	•				00		
ing at Port Ma	do .		do	•••	Thos	. Bes	sey		3 3	do		ī	00	3	00: 00:
do	do .		do do	•••	Jas.	Heif	nchey fern		3	do	j	1		3	00
Horse towing sco	W		do do		A. (albr	h aith		3	do do do		1 3	50	4	50
Team assisting Stone leveller		•••••	d o d o	•••	Jas.	Vand	ntague lerburg els on		15‡	do		1	25	19	06
uo		•••••	40	•••	1	. 0 111	· ·······		04	uo	•••	•	20		74

Number of Pay-list, 183. Pay-list in duplicate of Persons employed on the Welland Canal during the month of August, 1887, for building stone shed, Port Dalhousie; repairing break, Lock 19; repairing backs, cleaning out and opening ditches; repairing breakwater, Port Colborne; securing stone for tug, docks, &c.

					•
Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Carpenter	do do do do do do do do do do	Wm. M. Jones Jas. Hindson Wm. Tinlin Alf. Coons Wm. Patterson John Doig Robt. Johnston R. Houston	28½ days 29 do 27½ do 26 do 28 do 25 do 27 do 27 do 25 do 31 do	\$ cts. 75 00 2 00 2 00 2 00 2 00 2 00 1 75 1 75 1 50 2 00 3 50 1 50 1 50	\$ cts. 75 00 57 00 58 00 58 00 55 00 56 00 46 38 43 75 40 50 39 00 57 50 113 75 46 50 37 20
Division No. 1. Laborer	do do	J. Reynard (foreman) Thos. Kelly Jos. Andrews Geo. Shultis Cobe. Longley	11 do 27½ do 19½ do	2 00 1 50 1 50 1 50 1 50	55 00- 16 50- 41 25- 29 25- 27 75-
do do do Division No. 2.	do do d o .	Thos. Hayden Edward Crosby C. Cushman George Julian	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 50 1 50 1 50 1 50 1 50	42 75 24 75 33 75 40 50
Laborer		R. Preston H. Dell M. Nestor	14 do 18 do 18 do 28 do 11 do 3 do	1 50 1 50 1 50 1 50 1 50 1 50 1 50 1 50	39 00 21 00 27 00 27 00 42 00 16 50 4 50 7 50
Division No. 3. Laborer	do do do	G A. Jordon	26 do 26 do 26 do 26 do 13 do	1 50 1 50 3 50	52 00 39 75 39 75 39 75 38 25 45 50 40 25
Divisions Nos. 3 and 4. Laborer	do do do do	J. Clancey (foreman) Hugh Bailey Michael Blake Wm. Pew P. Patterson John Hanley Wm. Chelen	27 do 27 do 27 do 7 do 27 do	1 50 1 50 1 50 1 50 1 50	54 00 40 50 40 50 10 50 27 00

PAY-LIST in duplicate of persons employed on the Wellant Canal, &c .- Continued.

Capacity.	When Employed	Names.	Time.	Date.	Amount,
Division No. 4.				\$ ets.	\$ cts.
Laborer	 Aug 1887	W Cooke (foreman)	27 do	2 00	54 00
do	do	J. Cooke	27 do	1 50	40 50
do	do			1 50	40 50
do		C. Keen		1 50	40 50
do		J. Hardeson		1 50	39 75
do	do	1		1 50 1 50	40 50 15 00
do	do			1 50	13 13
do		M. Anthes		1 50	12 75
do	do	C. Smith		1 00	1 00
Team	do	Sam. Cook	13½ do	3 50	47 25
Old Welland Canal and Feeder.					
Carpenter	do	H. Morey, foreman		2 75	74 25
do	do	P. Shortell	· 24 do	2 00	48 00
do	do	S. Radcliffe		2 00	52 00
do	do	T. Rapsey		2 00 3 50	52 00 91 00
Team	do	Chas Hill		1 00	31 00
Laborer		Thos. O'Neil, forema		2 00	62 00
do	do	. Robt. Wilson	. 251 do	1 50	38 25
do	do	Jno Henphill	. 28 do	1 50	42 75
do	do .	. Rich. Grant	. 31 do	1 00	31 00
do		Arthur Bradley		1 50	37 50
do	1 -	Pat. Griffin		1 50	37 50
Water boy	1 -	Wm. Clarke P. Morgan		1 50 0 75	1 50
Carpenter		F. T. Walton, forem'		2 75	74 25
do		S. R. Bradley		2 00	54 00
do	. do .	D. S. Walton		2 00	54 00
do		Ed. Smith		2 00	54 00
do		Wm. Dunn		2 00	54 00
do	1 -	S. J. Hill F. F. Walton		2 00 1 50	54 00 40 50
Horse and waggon Team		John Coyle		3 50	47 25
do		James Wilson		3 50	3 50
Quarryman		Jas. Hamilton, fore'		2 00	54 00
do	· do ·	A. Bradley	23 do	1 50	34 50
do	do .	Jas. Faywell	25½ do	1 50	38 25
do	do .	Abr. Bradley	24 do 241 do	1 50 1 50	36 00 36 75
do	·· do	Jerry Langhey John Dundas	243 do	1 50	36 00
do	do do	John Bunuas	26 do		39 00
do	do	Geo. Wilson	26 do		39 00
Team		C. Tenbrook	25½ do	3 50	89 25
Feeder Division.					
~	do	E Blott	251 do	1 50	38 25
do		M. Green			
do		Ira Bessey			1 11 27
do	do	F. Fritz	5 do	. 1 50	8 25
Helper	i do	Jas. Blott	14 do	. 1 25	
Team	do	M. A. Smith	63 do		
Laborer		James Gamble			
do		Edward Webber		'	
do		James Davis R. G. Murdy		1	
49 <i>d</i> –18	, uv	273		•	

PAY-LIST in duplicate of persons employed on the Welland Canal, &c. - Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	
Feeder Division. Scowmen	do do do do do do do	John Thrush, forem'n Thos. Bessey	23 do 23½ do 23 do 23 do 18 do 6 do	\$ cts. 1 50 1 00 1 00 1 00 1 00 1 00 1 50 3 00 2 50	\$ cts. 34 50 23 00 23 50 23 00 23 00 23 00 18 00 27 00 18 00 5 00	

ACCOUNTS chargeable to Welland Canal, Repairs.

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts.
Aug. 1-3	\$3.25 6 gross screws \$2.30; 11 lbs. brimstone, at 5c., 55c 5 washers, at 15c, 75c.; 32 in. band iron, at 4c, \$1.28 4 brls. Portland cement, at \$5 400 lbs. white lead, at 7c. \$28; 5 lbs. French green, at 25c., \$1.25 1 lb. drop black 25c.; 1 lb. ultra-marine blue, 35c 2 pr. B. D. rollers, \$1.50; 20 car bolts, 60c	14 41 2 85 2 03 20 00 29 25 0 60 2 10 9 75	
	5 galls. black japan, at \$1.10, \$5.50; 112 lbs. spike, at 5c., \$5.60 20 ft. sheet line, at 10c. \$2; 1 paper nails, 25c	11 10 2 25 22 50 10 65 5 00 6 58 6 75 3 20 15 00	
do 1-31	James Wilson, Thorold— 7 los. oatmeal	0 25 53 84 1 20 4 86	164 02
do 1-31	Henry Mussen, Allanburgh.— Repairing clock, \$1; 1 iron pail, 35c	1 35 9 09 1 44 1 05 1 02	60 15
	274		13 95

Accounts chargeable to Welland Canal-Repairs-Continued.

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts.
Aug. 1-31	2 doz. large car bolts, \$1; 1 flat file, 37c	0 60 1 37 1 35	
	10 lbs. oatmeal, 40c.; ½ gal. lard oil, 50c	0 90	6 00
April 4-30	1 ½-inch cap, 7c.; 1 ½-gal. oil can, 25c; 1 ½-inch cap.,7c 9 ft. 1-inch pipe, 60c.; 6 1-inch clips, 15c.; 31 ft. 1-inch		
	pipe, \$3.10	4 15 2 80	
	\$2	3 25	
June 28	pipes, 75c	1 2751	
	4 \(\frac{1}{2}\)-inch nipples, \(\frac{1}{2}\); \(\frac{4}{2}\)-inch nipples, \(\frac{32c}{2}\)	1 72	
	globe valves, \$4	4 88 4 00	
•	16 hose clips, 67c.; 16 wrought iron legs, \$9.60; 400 ft. ‡-inch rubber hose, \$56	66 27 3 20	
			98 85
May 4 Aug. 8-31.		2 00 8 25	
	at 14c, 49c	7 56 1 50	2 5 6 1
Jan. 1-28.	S. Burrows, Port Colborne— Repairing dipper, 10c.; 1 galvanized pump for scow, \$3.	3 10	
July 1-30.	2 bolts	0 10	
Aug. 1-31.	40c; repairing pump, 75c	4 36 25 87	
	Charles Chapman, St. Catharines-		36 68
June 8.		50 00	109 75
Aug. 26.	To A. McIndoe, Thorold—2 6-inch sheaves, 5 inches by \$th inch	1	
do 1-31.	for each block		1 00
- 101,	30c., \$27.90	140 14	
	bronze at 45c., \$130.50	133 80 116 40	390 34
49	i—18 1 275		350 34

Accounts chargeable to Welland Canal, Repairs—Continued.

To James Wilson, Merriton— 781 lbs. plates repaired, \$15.62; 2,236 lbs. T bolts, at 2½c, \$55.90				
Aug. 1-31 To James Wilson, Merriton— 781 lbs. plates repaired, \$15.62; 2,236 lbs. T bolts, at 2½e., \$5.90 100 lbs. rag spikes at \$2c., \$3; 3,177 lbs. plates and bands at 4c., \$127.08	Date.	Nature of Work.	Amount.	Total.
Aug. 1-31 781 lbs. plates repaired, \$15.62; 2,236 lbs. T bolts, at 24c., \$5.90	1887.		\$ cts.	\$ cts
A	Aug. 1-31	781 lbs. plates repaired, \$15.62; 2,236 lbs. T bolts, at 2½c., \$55.90	İ	
Chase & Bros., Port Colborne— 1 stick rock elm (lock feeder)	do 1-31	1701, 69c	52 67 8 12 64 05 663 70	347 20
John Battle, Thorold— 26 brls. cement, at \$1.50 39 00 21 00	đo 31	Chase & Bros., Port Colborne— 1 stick rock elm (lock feeder)	3 50 5 50	819 91
May 19-26 J. H. Stanley, Port Colborne— 12 rolls wall paper, \$1.50; 12 rolls wall paper at 16c., \$1.92	do 8-9	John Battle, Thorold— 26 brls. cement, at \$1.50	39 00	11 00
Aug. 29 15½ cords stone delivered and used in repairing race way wash	May 19-26	12 rolls wall paper, \$50; 12 rolls wall paper at 16c., \$1.92.		60 00 5 22
J. S. Rogers, Thorold—Horse and buggy to St Catharines	Aug. 29	15 cords stone delivered and used in repairing race way		100 00
do 5 do \$1.50	do 10	D. W. McCain, Port Colborne—1,350 brick, at \$7 per M R. Foster, St. Catharines—		1 50 9 45
do 18 (Above for Mr. Chatfield, Inspector of bridges.) Thomas Myles & Son, Hamilton—19 days' use of boat for ferry, at 50c		do 5 do \$1.50	7 50 1 00	
do 1-31 do 1-31 do H. Vanderburgh, Allanburgh—25 trips and return from Allanburgh to Port Dalhousie, at 70c Mrs. Jordan, Port Robinson—19 days' board for mason from St. Catharines F. H. Becker, Thorold— 206 meals, at 25c., \$51.50; 12 beds, \$3; horse and waggon, \$1		(Above for Mr. Chatfield, Inspector of bridges.) Thomas Myles & Son, Hamilton—19 days' use of boat for		93 50
do Mrs. Jordan, Port Robinson—19 days' board for mason from St. Catharines	do 1-31	H. Vanderburgh, Allanburgh—25 trips and return from		9 50
do 7-10 F. H. Becker, Thorold— 206 meals, at 25c., \$51.50; 12 beds, \$3; horse and wag- gon, \$1	d o	Mrs. Jordan, Port Robinson—19 days' board for mason		17 50 14 25
	do 7-10	F. H. Becker, Thorold— 206 meals, at 25c., \$51.50; 12 beds, \$3; horse and wag-		65 50
J. G. Demars, Port Dalhousie— Paid charges on diver's pump	do 1-31	Paid charges on diver's pump	4 90	
Paid for lock tenders			4 00	10 50

Accounts Chargeable to Welland Canal, Repairs-Continued.

Date.	Nature of Work.	Amount.	Total.
1887.	· .	\$ cts.	\$ cts
	Richard House, St. Catharines-	0.45	
May 18 June 1-31	1 turpentine can	0 45 3 75	
June 1-51	2 funnels, 30c.; 5 hours' time 2 men at canal office, \$2.50	2 80	
	2 cord hooks, 30c.; 4 pieces galvanized iron, 50c.; solder,	1 05	
}	1 nipple, 7c.; 1 pair lock nuts, 10c.; 1 hour's time for		
	man, 30c Repairing plunger for pump	0 47	
July 4-31	Repairing galvanized pump, 50c.; 14 ft. 3 in. conductor,	0 20	
	\$1.40; 3 elbows, 45c	2 35	
ł	1 galvanized elbow, 25c.; 1 sheet tin, 10:.; 1½ day's labor, \$3	3 35	
l	Galvanized iron, 30c.; 1 hour's labor, 25c.; cleaning		
İ	chimney and repairing tap, 80c	1 35 1 77	
Aug. 1-31	f gal. measure, 50c.; f gal. measure, 35c.; I funnel, 20c.	1 05	
	1 augle elbow, 25c.; 41 hours' labor for 2, \$1.69	1 94	
İ	kev. \$2	5 00	
Ì	28 in. 13 in. iron pipe syphon, at 20c., \$5.60; 1 tee, 25c.;	6 05	
i	1 socket, 20c	1	
	60c.; 1 elbow, 25c	3 10 0 65	
	Bottom in 5 gal. can	0 25	•
	45 squares metallic roofing, at \$4.35	195 75	
1	118 lbs. ridge roll, at 10c., \$11.80; 10 lbs. binding twine, at 15c., \$1.50.	13 30	
ļ	2 gals. paint, at \$1 35, \$2 70; 1 keg wire nails, \$8	10 70	
1	67 squares metallic siding, \$3.75	213 75	
į	at 25c., \$1	58 00	
	12 elbows, at 30c., \$3.60; 76 feet galvanized conductor, at 25c., \$19	22 60	
	316 lbs. galvanized corner covering, at 10c	31 60	
j	Labor fitting on 102 squares metallic roofing and siding, at 50c.	51 00	
	-		632 28
]	Old Welland Canal a d Feeder.	j	
		l	
July 1-31	Coy Bros., St Catharines— 8 scythe stones, at 10c., 80c.; 3 scythes, \$3; 2 scythes,	1	
1 02	1 50	5 30 3 17	
[2 snaths, \$1.25; 2 snaths, \$1.50; 6 staples, at 7c, 42c 3 gals. boiled oil, at 80c., \$2.40; 97 lbs. cut nails, at 4c	3 1,	
[\$3.88	6 28 3 50	
Ì	10 lb. shingle nails, 50c.; 3 gals. lard oil, \$3 1 latch, 15c.; 1 bolt, 15c.; 100 lbs. genuine white lead,	3 00 1	
.	\$7.50	7 80	
Aug. 1-31	3 gals. lard oil, \$3; 3 gals. black oil, at 30c., 90c	3 90 13 00	
	30 lbs. cut nails, \$1.20; 1 padlock, 25c	1 45	
1	400 ft. double tape fuse	8 00	52 40
	James Wilson, Thorold-	4 00	
do 1-31	4 gals. lard oil, at \$1, \$4; 1 oil can, 60c	4 60	
1	washers, 30c	1 85	
	5 lbs. nails, 17c.; 1 auger bit, 30c.; 210 lbs. spikes, at	9 92	
	41c., \$9.45 6 bolts, 24c.; 6 lbs. strap hinges, at 8c., 48c.; 1 lb. wash-	1	
1	ers, 5c	0 77	

Accounts chargeable to Welland Canal, Repairs-Continued.

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts.
	To James Wilson, Thorold—	•	•
	200 lbs. 6 in. spikes, at 5c. \$10; 1 gross screws, 30c.; } doz. files, 60c	10 90	
	200 lbs. cut nails, at 31c., \$7; 24 wood screws, at 6c., \$1.44	8 44	
	12 doz. screws, at 5c., 60c.; 4 lbs. nails, 14c.; ½ lb. wash-		
	ers, 5c 3 lbs. rivets, 24c.; 1 pick handle, 25c.; 80 lbs. rope, at	0 79	
	15c., \$12	12 49	40.70
do 17	John Battle, Thorold-6 barrels cement, at \$1.50		49 76 9 00
	James Rolston, Duanville-	·	
Aug. 1-31	1 d. h. shovel, \$1; ½ doz. pencils, 25c.; 2 lumb. pencils, 20c.	1 45	
	4 lbs. nails, 16c.; screws, 5c.; 1 sledge, \$1.25; 2 pad-	ĺ	
	locks, \$1	2 46 30 80	
	3 lbs. washers, 30c.; 98 lbs. B. pure manilla, at 15c, \$14.70	15 00	
	1 saw rod, 10c.; 3 glass 10x12, 27c.; 2 glass 8½x14, 14c 2 hooks and eyes, 10c.; putty, 5c.; 27 lbs. sq.ruts, \$1.62	0 51 1 77	
	4 lbs. washers, 40c.; 1 auger, 60c.; 300 lbs. iron, \$7.50;	9 50	
	1 pick handle, 25c.; 4 glass 10x12, 24c.; 5 tower bolts,	1	
	2 lanterns, \$1.30; 1 globe, 15c.; 4 lbs. manilla rope, at	0 82	
	15c., 60c	2 05 2 90	
	2 brushes, 38c.; 1 whisk, 15c.; 14-in. auger, 75c.; 1		
	handle, 10c	1 38	
	at 5c., \$11.20	11 95	
	62c	3 65	
	6 bolts, 18c.; paid freight, \$2.03; 1 gross screws, 15c.; borax, 5c.	2 41	
	25 lbs. red lead, \$2; 1 gall. boiled oil, 80c.; 5 lbs.		
	oxide, 25c	3 05	
	lard oil, 35c	1 35	01.07
35 1 00	W. N. Braund, Dunnville-		91 07
May 1-30 July 2	1	1 85 1 00	
Aug. 1-6	3 joints pipe, 45c; 1 double elbow, 50c; pail, 50c	1 45	
	1 shoe scraper, 25c.; 1 lifter, 10c	0 35	
	joint pipe, 10c.; 1 large galv. water bowl, 30c	10 00 0 40	
	1 tea kettle, \$1.30; 1 galv. dustpan, 25c.; cap 20c	1 75	
	Charles Loesch, Welland-		18 00
July 25-26	9 meals, at 25c., \$2 25; feed for team, \$1.50		3 75
J uly 26	James Upper, Allanburgh— 8 meals, \$2; lodging, 50c.; horse feed, \$1 For men over night after leaving scow at Allanburgh.		3 50
	James Wilson, Merritton-		
Aug. 1-31	2,204 lbs. castings, at 3½c	77 14	
	45 lbs. brass nuts, at 30c	13 50 156 20	
	2 new valves, complete, at \$58	116 00	

Accounts chargeable to Welland Canal-Repairs-Continued.

Date.	Nature of Work.	Amount.	Total.
Aug. 1-31	James Wilson, Merritton— 718 lbs. bars rep., at 1½c., \$10.77; 518 lbs. bolts rep., at 2c., \$10.36	\$ cts 21 13 14 73 45 40 148 25 7 23	\$ cts
A ug. 1–31	McCleary & McLean, Thorold— 800 ft. pine, at \$13.50, \$10.80; 2,920 ft. pine, at \$16, \$46.72 500 do \$17.50, \$8.75; 1,538 do \$18, \$27.68 655 do \$20, \$13.10; 128 do \$25, \$3.20 105 do \$30, \$3.15 4,571 ft. oak, at \$25, \$114.27; 1,046 ft. oak, at \$28, \$29.29 85 do \$30 103 square shingles, at \$2.25 25 bunches lath, at 25c., \$6.25; 100 ft. mouldings, at 2c., \$2	57 52 36 43 16 30 3 15 143 56 2 55 24 00 8 25	236 74 291 76
		-	4,222 51

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of September, 1887, for completing Stone Shed, Port Dalhousie, repairing banks, opening up and cleaning out ditches, turning snub posts, repairing Breakwater, Port Colborne, chargeable to Renewals and Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do do do do d	do do do do do do do do do	Wm. Patterson R. Johnson John Doig R. Houston	29½ days 26 do 25¾ do 25 do 26 do 27½ do 25½ do 26 do 24 do	\$ cts. 75 00 2 00 2 00 2 00 2 00 2 00 2 00 2 00	\$ cts. 75 00 59 00 52 00 51 50 50 00 52 00 54 50 44 63 44 50 36 00
Painter	do	Geo. Irvine	26 do	1 57 2 00 3 50	37 50 52 00 88 37
Laborer	do do do	C. Reed, foreman Geo. Julian Thos. McClelland Alex. McCullough D. Salvin Adam Flood Andrew Secord John Yates Jas. Steven Thos. Hammond Wm. Daley Thos. Hayden Joseph Johnson Oscar Sharp John McMillan	26 do 26 do 27 do 27 do 28 do 27 do 22 do 221 do 222 do 23 do 10 do	2 00 1 50 1 50 1 50 1 50 1 50 1 50 1 50 1	52 00 39 00 39 00 39 00 40 50 36 00 39 00 38 25 33 00 33 75 34 50 45 00

PAY-LIST in duplicate of persons employed on the Welland Canal, &c. - Continued.

Capacity.	Wher Employ		Names.	Time.	Rate.	Amo	ount.
Division No. 2.					\$ cts.		\$ cts.
aborer	Sept., 1	887	Jas. Reynard, foreman	11 days	2 00		22 00
do	do		John O'Neil		1 50		15 75
do	d o վ o		Wm. Wilson Joseph Wilson		1 50 1 50		15 75 15 75
do	do		D. McIntyre		1 50		15 75
do	do		John Malia		1 50		15 75
do	do		F. Elliott		1 50		15 75
do	do	•••	R. Arms		1 50		15 75
do	do	•••	James Irvine		1 50		20 63
do	do		Wm. Wills		1 50		15 75
dodo	do		Thos Donahue		1 50 1 50		21 75. 15 75
do	do do	•••	John McNolty Wm. Mable	1104 do	1 50		17 25
do	do	•••	Wm. Collard	10 do	1 50		15 75
do	do	•••			1 50		16 50
do	do	•••	F. Donahue		1 50		15 75
do	do	•••	Geo. Cashen		1 50		13 50
do	do		Isaac McMann		1,50		3 75
do	do	•••	Frank Galbraith	2 do	1 50		3 00
do	do	•••	James Smerdon		1 50		1 50
do	do		John Cole		1 50		1 50
dodo	do		R. Grisdale		1 50 1 50		1 50 3 00
landy man	do		Saml Bradley		1 75		6 13
do	do		Jas. Reynolds		1 75		4 37
do			Jas. Bradley		1 75		4 37
do			James Franklin		1 75		6 12
do	do		Peter Paxton		1 75		4 37
do	do	•••	William Elliott	1½ do	1 75		2 13
do	do		Isaac Johnston		1 75		5 25
do	do		Thos. Scott		1 75		6 13
do	do		Jos. Reuter		1 50		7 50 28 50
ream	do		H. Dill Robt. Hoover		1 50 3 25		34 13
Divis on No. 3.							
Laborer	do		R. A. Booth, foreman	. 17 do	2 00	l	34 00
do			G. A. Jordan		2 00	1)	
do	do		. do	. 16 do	1 75	}	46 00
do					1 50]	39 90
dodo	1 40	••			1 50	1	36 00
do	1	••			1 50	l	39 00
Mason		••	. Vas. Hansel	. 251 do	1 50 1 75	l	38 63 43 75
Feam	do	•••	John Watson		3 50	1	43 78
Divisions Nos. 3 and 4.				122 40	000		20 10
Laborer	do		James Clancov	26 40	2 00		52 00
do	1	••	James Clancey Hugh Bailey	26 do 26 do	2 00 1 50		39 00
do	do	•	Michl. Blake	·· 26 do	1 50	i	39 0
do	· do	•	Wm. Pew		1 50	1	37 5
Watchman	ob l		John Hanley			1	26 0
do	do	•			1 50	1	6 0
Di. ision No. 4.							
Laborer			Wm. Cook, foreman	26 do	2 00		52 0
do	1 7		Jacob Cook	24½ do	1 50	1	36 7
do	1 ~~		William Decks			1	39 0
dodo	1		Chas. Keen			1	39 0
do	,		John Harbison			1	18 0
	· i uo	•	James Leslie	¹26 do	l 150	1	39 0

PAY LIST in duplicate of persons employed on the Welland Canal, &c .- Continued.

Capacity.	Whe Emple		Names.	Time.	Rate.	Amount.
					\$ cts.	\$ cts
aborer	Sept.	1887	John Mahagan	26 days	1 50	39 00
do	dó		John Mahagan Michl. Anthes	26 do	1 50	39 00
do	do	•••	John Moyer	26 d o	1 50	39 00
do	do	•••	Geo. Petty	16 do		24 00
do Feam	do do	•••	Chas. Smith Saml. Cook	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 50 3 50	4 50 76 12
Old Welland Canal and Feeder.				4		
Carpenter	do		N. Morey, foreman	26 do	2 75	71 &0
do	do	•••	P. Shortell	253 do	2 00	51 50
do	do	•••	S. Radcliffe	26 do	ا ممما	52 00
do	do	•••	T. Rapsey		2 00	49 00
do	do	•••	Chas. Hill	26 do		91 00
Watchman	do		J. W. Boyle		1 00	30 00
aborer	do	•••	Thos. O'Neil		2 00	54 00
do	do	•••	R. Wilson			39 00
do	do		John Hunphill		1 50	42 00
do	do		Geo. Wilson		1 50	39 00
do	do		Richard Grant		1 00	23 00
do	do		R. Edgraft, jr		1 50	27 00
Quarry and scow man	do		Jas. Hamilton			55 00 39 00
do dodo	do do		Albert Bradley		1 50	41 2
do do	do		Jas. Faywell		امعا	41 2
do do	do		Albert Bradley,		1 1 -0 1	39 3
do do	do	•••	Jerry Langhey John Dundas	264 do	1 50	24 00
do do	do	•••	John Brennan		1 50	41 2
do do	do		Jas. Reynard		1 50 1	15 00
ream	do	•••	C. Tenbrook		3 50	94 50
Curner	do	•••	Alex. Galt		3 00	39 00
Machinist	do		Jas. Bredner	8 do	2 25	18 00
Carpenter	do	•••	Fred Woods		1 75	14 00
do	do	•••	James Elliott		1 75	14 00
Laborer	do	•••	P. Patterson		1 50	12 00
_ do	do	•••	Geo. House	8 do		12 00
Jarpenter	do	•••	F. T. Walton, foreman	26 do	2 75	71 50
do	do	••••	S R. Bradley		2 00	54 00
do	do	•••		26 do	2 00	52 00
do	do	•••	D. S. Walton		2 00	56 00
do	do	•••	Wm. H. Dunn		2 00	44 00 52 00
do Horse and waggon	do	•••	S. J. Hill		2 00	31 5
Mason	do	•••	F. T. Walton			78 0
Laborer	do		Pat Griffin		1	39 0
do	do	•••			1 2 00	39 0
Dunnvil e.						
Carpenter	do		E. Blott		1 50	22 50
do	do		M. Green	19 do		29 2
_ do	do	•••	Ira Bessey E. Webber	14 do		21 0
Laborer	do	•••	E. Webber	26 do		32 5
do	do	•••	James Blott	.'26 do		32 5
do	do		James Davis		1 25	32 5
do	do		James Gamble			18 7
do	do		Wm. Bessey	0 3		6 2
ream	do		M. A. Smith	ON!		24 0
dodo	do		R. G. Murdy, 2 D. Slaid		0.00	68 7
W11	do		117. 171810	4 00	2 50	11 2

ACCOUNTS Chargeable to Welland Canal, Repairs.

Date.	Nature of Work.	Amount.	Total.	
1887.		\$ cts.	\$ cts	
Sent 1 20	To Coy Bros., St. Catharines—	9 00		
Sept. 1-30	3 cross cut saws, \$2, \$2.50, \$4.50	7 50		
	624 gnikes at 5c \$31.20 · 5 hack stanles 35c	31 55		
	50 lbs. oxide paints, \$3; 2 paint brushes, \$1.75	4 75		
	1 putty knife, 25c; 1 lb. ultra-marine blue, 25c	0 50 1 80		
	2 flat paint brushes, \$1.75; 4 oval paint brushes, \$6	7 75		
	1 gallon shellac, \$3; 54 gallons castor oil, \$6.88	9 88		
	45 gallons raw oil, at 75c., \$33.75; 45½ gallons boiled oil, at 78c, \$35.49	69 24		
	6 bales oakum, \$30; 300 deck plugs, 75c	30 75		
	1 wrench, 75c.; 1 sash tool, 25c.; 5 gallons turpentine,			
	at 75c., \$3.75	4 75		
	52 steel hammers, at 30c., \$15.60; 16½ feet belting, at 65c., \$10.56	26 16		
	200 lbs. white lead, \$15; 500 deck plugs, \$1.50	16 50		
	2 seanny brushes, 60c; 101 lbs. tallow, at 10c., \$10.10	10 70		
	5 gallons lard oil, \$5; 1 hollow auger, \$5	10 00 1 32 25		
	spine sees, \$2.20, 40 batt brooms, at 100., \$50		273 08	
1. 1.00	James Wilson, Thorold-	0.20		
do 1–30	\$\frac{3}{4}\$ lb. marline, 15c; 1 lb. lamp black, 15c	0 30 27 20		
	2 padlocks, at 45c	0 90		
			28 40	
a. 190	R. A. Abbey, Port Robinson—	1.05		
do 1-30	1 box matches, 15c.; 3 gallons coal oil, 90c	1 05 0 40		
	25 lbs. white lead, \$1.80; 1 gallon boiled oil, \$1	2 80		
	d gallon turpentine	0 35		
	Wm. H Garden, Welland-		4 60	
do 1-30		0 84		
	Paid for carting bridge machinist's tools to G.T.R	0 50		
	John Mathews, Port Colborne—		1 3	
do 1-30		İ		
	\$5.25	15 25		
	5½ gallons boiled oil, at 80c., \$4.40; 10 lbs. putty, at	4.00		
	1 can raw umber, 25c.; coin screw, 10c	4 90 0 35		
	1 mat block, \$1.25; coin screw, 38c.; 10 bushels lime,	0 00		
	\$2 50	4 13		
	1 chisel handle, 5c.; 2 files, 20c.; 25 lbs. nails, at 4c,	1 25		
•	4 lbs. nails, at 5c., 20c.; ½ doz carpenters' chalk, 20c	0 40		
	1 barrel oats	1 63		
do 20	. George Lloyd, St. Catharines-17 Mascotte coal stoves,		27 9	
do 29	filled up, and lock houses, \$14.50		246 5	
	Richard Hou e, St. Catharines-	*		
do 5–13		4 00		
	Heating stove, \$10; 4½ joints pipe, 90c	10 90 1 20		
			16 1	
1886.	P. McMurray, Welland—	ا م		
Nov. 20 Dec. 14		0 35 0 50		
1887.)		
Mar. 22	l joint pipe, 10c.; (April 20th) 1 joint pipe, 10c	0 20		
Apr. 20		1 30		
do 30 May 2–26		0 35 1 75		
	Repairing smoke stack, 25c.; new glass and repairing			
		1 75	1	

Accounts chargeable to Welland Canal, Repairs -Continued.

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts
May 2-26	1 large sprinkler, \$1; 4 joints pipe, 65c.; 1 dipper, 20c. 1 lantern globe, 20c.; 3 new glasses, 40c; 2 pails, 50c 2 new glasses and repairing lamp, 40c.; repairing 2 lamps	1 85 1 10	
Aug. 12	and glasses, 75c	1 15 0 5 9	9 80
Sept. 15			3 00
do 13-15			
Sept. 30	posts To Mrs. Jordan, Port Robinson— Meals, 8 men, 1 day each, at 75c	į.	5 00
do 1-30	Charles A. White, Humberstone— 18 meals for diver, at 25c., \$4.50; hay and oats for team, \$1.50	6 00 2 50 0 50 6 00	27 00 15 00
do 14-18	Aben Simpson, Port Colborne-8 meals and 2 beds for diver and helper, at 25c		. 2 50
	J. G. Demare, Port Dalhousie— 1 railway fare diver and helper, and freight on air pump to Port Colborne	3 00	
d o 29	Return fare for diver and helper to Humberstone, and freight on air pump	4 25	
Aug. 5-2-2-5ept. 2-2-	F. T Walton, Thorold-	3 80	11 45
do 1-3	H. Vanderburgh, Allanburgh-26 railway fares, Allanburgh		6 10
	to Port Dalhousie and return, at 70c		18 20
do_1-3	Robert Foster, St. Catharines— Horse and buggy, 3 days, at \$2.50	7 50 10 50 62 £0	80 50
do	Grand Trunk Railway Co., Port Colborne— Freight on diving pump, Port Dalhousie	0 35 1 60	5 6 5
Aug.	John Cloy, Thorold—320 spike		12 80
6	A. McIndoe, Thoroid— Repairing blocks, 1 10 in. double shell and 1 steel pin 1 new side and end piece on double 10 in. block	2 75 1 25	4 00
	283)	4 (

Accounts chargeable to Welland Canal—Repairs—Continued.

Da	ate.	Nature of Work.	Amoun	t.	Tota	ıl.
18	87.		\$ (ts.	\$	cts.
Aug.		To C. F. & H. F. Dunbar, Port Colborne—Use of bridge, one-half day, removing large stone obstruction from bottom of canal	******		5	0 00
Sept.	1-30	James Wilson, Merritton-				
.		Repairing rods, &c., 160 lbs., at 2c	3 55			
		do screw bolts, 2,209 lbs., at 2½c New plates and bands, 6,447 lbs., at 4c	257			
		do screw bolts, 3,510 lbs., at 5c	175 9			
		do steel, 74½ lbs., at 20c	14			
	Ì	Steeling, 55 lbs., at 6c	3	30	£1	0 61
Sept.	1-30	James Wilson, Merritton-		_	91	9 61
•		1,434 lbs. castings, at 3½c	50			
		742 lbs castings and gear, at 7c	51 1			
		210 lbs. brass nuts, at 30c	63	00		
		328 hrs. drilling, boring, planing and filling, at 40c 359 lbs. phosphor bronze, at 45c	131			
•				-	45	9 68
do	1-30	McCleary & McLean, Thorold— 7,620 ft. pine, at \$16, \$121.92; 1,142 ft. pine, at \$17,				
		\$19 41	141	33		
		1,612 ft. pine, at \$17.50, \$28,21; 856 ft. pine, at \$18, \$15.41	43	62		
		1,150 ft. pine, at \$20, \$23; 150 ft. pine, at \$25, \$3.75	26			
		84 ft. pine, at \$30, \$2.52; 1,067 ft. pine, at \$35, \$37.35	39 10			
		263 ft. pine, at \$30	10	"		
		\$162.18	285	01 36		
		160 ft. moulding, \$1.60; 234 ft. moulding, at 1½c., \$3.51;	Ĭ	30		
		240 ft. moulding, \$4.80	9	91		
		75 ft. moulding, at 3c., \$2.25; 50 ft. moulding, at 4c., \$2; 108 ft. moulding, at 5c., \$5 40	9	65		
		1 725 nickets at 3c \$21 75 · 31 cedar nosts at 25c \$7 75 ·	36	40		
		3,000 shingles, at \$2.30, \$6.90	2	63		
		4 urns (turning), \$1.40; 360 ft. stops, at 32c., \$2.70	4	10		
		108 ft. stops	<u> </u>	08	62	0 23
do	30	Battle & Smith, Thorold-53½ galls paint, No. 15, at \$1.90		••••	10	1 65
		Old Welland Canal.				
do	1-30	To Coy Bros., St. Catharines-	١.			
		1 paint brush, \$1.25; glass and putty, 12c	3	37		
,				_		4 37
do	1–30	James Wilson, Thorold— Lace leather, 60c.; 2 galls. lard oil, \$2	2	60		
		2 paint brushes, \$2; 5 paint brushes, at 50c., \$2.50	4	50		
		4 lbs. drop black, \$1; ld galls. turpentine, \$1.50; 20 lbs. putty, \$1	2	50		
		7 lbs. green paint, at 28c., \$1.96 : 1 gall, oil, \$1:512 lbs.				
		spikes, at 5c., \$25.60	28	56		
		at 10c, 60c	1 2	05		
		½ gall. knotting, \$1.75; 98 lbs. rope, at 15c., \$14.70; nails, 50c	16	95		
		Axe and handles	i	25		
		*40 lbs. ham, at 15c., \$6; corn beef, 40c.; 2 lbs. tea, \$1; 25 lbs. butter, at 30c., \$7.50	14	90		
		2 54				

ACCOUNTS chargeable to Welland Canal-Repairs-Continued.

Date.	Nature of Work.	Amount.	Total.	
1887.		\$ cts.	\$ cts	
Sept. 1-30	To James Wilson, Thorold— *Sugar, \$2; potatoes, \$3.30; cabbage, \$1; soap, 25c.; salt and pepper, 35c	6 90 0 85 5 30	86 6	
do 1-30	To James Rolston, Dunnville— 1 pick-axe and handle, \$1.25; 12½ lbs. spikes, 50c.; 1 ball twine, 25c. 16 ft. manilla line, at 15c, \$2.40; 2 ft. gas-pipe, 20c.; 1 paper file, 20c 32 ft. ½-in iron, 80c.; 336 ft. wrought spike, at 5c., \$16 80; 114 ft. iron, at 2½c., \$2.85 Paid freight on stone, \$1.17; 21 lbs putty, 84c; washers, 15c 2 handles, 50c.; padlock, 50c.; hasp an 1 hook, 15c.; 30 spikes, \$1.50 14 ft. ½-in, iron, 35c.; 267 ft. iron, \$6 68	2 00 2 80 20 45 2 16 2 65 7 03		
do 1-30	To Henry Mussen, Allanburgh - l gross screws, 30c.; 20 lbs. nails, at 4c., 80c.; 5 lbs. shingle nails, 25c	1 35	37 09	
	5 lbs. zinc nails, at 6c., 30c.; 2 wood pails, 5 c.; 12 lbs. nails, 48c.; 1 dipper, 15c	1 43 0 52 2 60		
	33 yds. border, \$1.65; 12 lbs. shingle nails, 60c.; 10 lbs. nails, 40c	2 65 4 25		
	15 lbs. zinc nails, 90c.; 3 rolls wall paper, 60c.; 10 lbs.	5 25 1 90		
	2 pairs large hinges and screws, 50c.; 2 pairs loose butt screws, 50c Locks and knobs, \$1.50; 1 gross screws, 35c.; sand	1 00		
	paper, 10c	1 95		
	screws, 10c	1 20 1 09		
	20 spikes, \$1; 15 lbs nails, 75c.; 10 lbs. nails, 40c.; 1½ doz. coat hooks, 40c 1 box matches, 13c.; 1 doz. screws, 5c.; 1 trap door ring	2 55		
	and screws, 20c	0 38.		
	1 box glass, \$2	6 60		
	1 pair hinges, 15c.; l gall. turpentine, 80c.; black paint, 15c	2 38 1 10 2 50	40 7	
Aug. 31. Sept. 12. do 23.	8 washers, 10c.; 3 hooks, 75c.; 3 bolts, 25c	0 63 1 10 1 00		
_	To R. G. Murdy, Dunnville -55 yds		2 7 33 0	

ACCOUNTS chargeable to Welland Canal-Repairs - Continued.

Date.	Nature of Work.	Amount.	Total.
100%		\$ cts.	\$ cts.
1887. Sept. 1-30	To James Wilson, Merritton— Repairing shafts, 867, at 2c	17 34 32 35 3 19 77 88 92 50 3 18 0 60	
do 1-30	James Wilson; Merritton— New castings, 1,559 lbs., at 3½c	54 56 2 40 1 25 14 10 58 00 103 20	226 04
d o 1–10	Thomas Grenville, Thorold-2 men painting, 36 days, at		233 51
July 25	Wm. Wilson, St. Catharines—Kalsomining ceiling, Canal		72 00
Sept. 1-30	Office McCleary & McLean, Thorold— 4,595 ft. pine, at \$16, \$73 52; 387 ft. pine, at \$17.50, \$6.78 3,829 do 18, 68.92; 909 do \$20, \$18.18 466 do 21, 9.79; 1,024 do 23, 23.55 899 ft. oak, at 25, 22.47; 5,009 ft. oak, at 27, 118.24 4,222 ft oak, at \$28	87 10 33 34 130 71 118 22 23 46	2 50
do 21-22-23.	George Gibson, P.L.S., St. Catharines— Survey Canal boundaries and mill race at Thorold As istant, \$3; plan of above survey, \$5	10 00 8 00	575 70
Aug. 11	Henry Law, P.L.S., Dunnville— Survey R. Ferguson's lot, Cayuga Expenses, \$1.50; plan, \$2	6 00 3 50	18 00
Sept. 21	E. Riddle & Son, St. Catharines— 304 ft. 6-inch tile, at 20 cts., \$60.80; 6 6-inch elbows, at 60 cts., \$3.60	64 40	67 60
		-	3,959 20

PAY-LIST in duplicate of persons employed on the Dunnville Division of the Welland Canal during the month of September to repair the West Pier at Port Maitland, chargeable to Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.	
Foreman on pier do do do do do do do do do do do do do	do do	Richard Mitchel Banks Nelson John Taylor. Joe Matthews David Cooper. Chas. Crawford Freeman Green. John McGee Geo. Mylne Bart. Bennett Wm. Moss. Chas. Runion Wm. Billington Robert Montague John Thrush	26 do 25 do 27 do 7 do 7 do 17 do 16 do 18 do 18 do 26 do 26 do 26 do 26 do 26 do 27 do 28 do 29 do 21 do 21 do 21 do 22 do 21 do 22 do 21 do	\$ cts. 2 00 1 50 1 50 1 50 1 50 1 50 1 50 1 50 1	\$ cts 52 00 39 00 39 00 37 50 39 00 37 50 11 25 10 50 21 26 8 75 20 06 6 25 5 06 29 37 39 06 32 56 31 26 32 56 32	

ACCOUNTS chargeable to Welland Canal, Repairs.

Date.	Nature of Work.	Amount.	Total.
1887.	James Rolston	\$ cts. 61 18 53 40	\$ cts.
			114 58

PAY-List in duplicate of persons employed on the Welland Canal during the month of October, 1887, to repairing floats, swing and tow-path bridges, &c., replanking same, repairing banks, opening up and cleaning out back ditches, facing slopes harbor with stones, &c., chargeable to Renewals and Repairs.

	When				
Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Carpenter.		H. Vanderburgh		\$ cts.	\$ cts. 75 00
dodo	do	Wm. M. Jones Jas Hindson		2 00 2 00	36 00
do	do	Wm. Patterson		2 00	54 00 53 00
do	d			2 00	52 00
do	do	A. Coons		2 00	52 00
Painter	do	A. W. Impey		2 00	56 00
Handy man	do	John Doig	201 do	1 75	35 88
do	do		11½ do	1 75	20 13
Caulker	do	R. Marshall	242 do	2 00	49 00
do	do	John BowmanR. Houston	232 do	2 00	47 00
do		Coores Ingin	111 do	1 50	17 25
Team		George Irvin John Shultes	1112 do	1 50 3 50	17 25 91 00
1 саш	uo	land Duarces	20 do	3 50	91 00
Division No. 1.	! }				
Laborer		.Con Reed, foreman		2 00	52 00
dodo	do	F. D. Salvin	17 do	1 50	25 50
do	do	Andrew Secord	28 do	1 50 1 50	42 00 16 50
do	do	John Gates	11 do	1 50	18 00
do	do	Jas. Steven	25 do	1 50	37 50
do	do	Wm. Daley	22 do	1 50	33 00
do	do	mit		1 50	39 00
do	do	Thos. Kelley	3 do	1 50	4 50
do	do	J. McClelland	26 do	1 50	39 00
do		Alex, McColloch		1 50	39 00
do		Geo. Julian		1 50	39 00
Horse and waggon Team (2)		A. Reed Jos. Johnston		1 50	39 00
do		J. Johnston		3 50 1 75	138 25 6 13
Division No. 2.			2 40		0.0
	Oct 1007	Uinam Dall	20 3	1 50	
Laborerdo	do	Jacob Reuter	26 days	1 50 1 50	39 00
do	do			1 50	3 00 30 00
Team		Robt. Hoover	11 do	3 50	4 38
Division No. 3.			24 40 111	0 00	1 20
Laborer	Oct 1897	R A Rooth	26 deve	0.00	F0.00
do	do	R. A. Booth	231 do	2 00 1 75	52 00 41 13
do	do	John Madigan	26 do	1 50	39 00
do	do	George Brown	26 do	1 50	39 00
do	do	James Hansel	25 do	1 50	37 50
_ do		Ben. Redfern		1 50	37 50
Team	do	John Watson	10½ do	3 50	36 70
Divisi ns 3 and 4.					
Laborer	Oct., 1887.	Jas. Clancy, foreman.	 26 days	2 00	52 00
do	do	H. Bailey	26 do	1 50	39 00
do		M. Blake	26 do	1 50	39 00
do	do			1 50	37 50
Wotahman		John Barry		1 50	37 50
Watchman do	do	Oscar Sharp	31 do	1 50	46 50
do		John McMillan John Hanley		1 20 1 00	37 20 26 00
	,	285	;=0 u0	1 00	20 00

PAY-LIST in duplicate of Persons employed on the Old Welland and Feeder Canal, &c.—Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Division No. 4. Carpenter	do do do do do do do do do	Jacob Cook John Bradley Wm. Decks C. Kein J. Leslie J. Mehagan M. Anthes J. Meyer G. Petty	20½ do 26 do 25½ do 26 do 26 do 26 do 26 do 26 do 26 do	\$ cts. 2 00 1 50 1 50 1 50 1 50 1 50 1 50 1 50 1	\$ cts. 52 00 30 75 39 00 38 25 39 00 39 00 39 00 39 00 39 00 39 00
do	do do do do do do	Chas. Smith	10 do 2 do 2 do 1½ do 1½ do 1 do 24½ do	1 50 1 50 3 50	1 50 15 00 3 00 3 00 1 88 2 25 1 50 82 75 3 50

NUMBER of Pay-list, 189. Pay-list in duplicate of Persons employed on the Old Welland and Feeder Canal during the month of October, 1887, to re-building lock gates, also repairing old lock gates, repairing lock on banks, also repairing same, quarrying and boating stones, chargeable to Repairs.

Carpenter	Capacity.	When Employed	Names.	Time.	Rate.	Amount.
do		,	·		\$ cts.	\$ cts
do		Oct., 1887.				75 62
do						
Caulker						
Watchman						
Team						
Laborer						
do do Robt. Wilson. 27 do 1 50 40 50 do do Jno. Hemphill. 26 do 1 50 39 00 do do Geo. Wilson. 26 do 1 50 39 00 do do Geo. Wilson. 26 do 1 50 39 00 do do Acceptage and Company 26 do 1 50 39 00 do do Arbur Bradley 25 do 1 50 39 00 do do Ab. Bradley 27 do 1 50 39 00 do do Jon. Dundas 25 do 1 50 39 00 do do Jon. Brennan 26 do 1 50 39 00 do do Jon. Brennan 26 do 1 50 39 00 do do Jon. Brennan 26 do 1 50 39 00 do Jas. Reynard 1 do 1 50 28 50 Team do Jerry Langhey 19 do 1 50 28 50						
do do Jno. Hemphill 26 do 1 50 39 00 do do Geo. Wilson 26 do 1 50 39 00 do do Richard Grant 24 do 1 00 24 00 Scow and quarry man do Jas. Hamilton 26 do 2 00 52 00 do do Jas. Faywell 26 do 1 50 39 00 do do Jas. Faywell 26 do 1 50 39 00 do do Jas. Faywell 26 do 1 50 39 00 do do Jon. Dundas 25 do 1 50 39 00 do do John Brennan 26 do 1 50 39 00 do do James O. Rose 2 do 1 50 39 00 do do Jerry Langhey 19 do 1 50 28 50 Team do Jerry Langhey 19 do						
do do Geo. Wilson	_				1	
Scow and quarry man						
Seow and quarry man	•	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
do do Arthur Bradley 25 do 1 50 37 50 do do Jas. Faywell 26 do 1 50 39 90 do do Ab. Bradley 27 do 1 50 39 90 do do John Brennan 26 do 1 50 39 90 do do James O. Rose 2 do 1 50 39 90 do do James O. Rose 2 do 1 50 39 90 do Jas. Reynard 1 do 1 50 29 90 do Jas. Reynard 1 do 1 50 28 50 Team do Jerry Langhey 19 do 1 50 28 50 Mason do Mem. Chandler 2 do 1 75 35 50						
do do Jas. Faywell 26 do 1 50 39 00 do do Ab. Bradley 27 do 1 50 40 50 do do Jno. Dundas 25 do 1 50 37 50 do do John Brennan 26 do 1 50 39 00 do do Jas. Reynard 1 do 1 50 9 00 do do Jas. Reynard 1 do 1 50 28 50 do do Jas. Reynard 1 do 1 50 28 50 Team do C. Penbrook 18½ do 3 50 64 75 Mason do Wm. Chandler 2 do 3 50 64 75 Turner do Alex. Gault 2 do 3 00 60 Carpenter do F. T. Walton 26½ days 2 75 72 88 do do S. R. Bradley 26½ do 2 00 53 00 do do W. H. Dunn 26½ do 2 00 <td< td=""><td>•</td><td>_</td><td></td><td></td><td></td><td></td></td<>	•	_				
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do do Jno. Dundas. 25 do 1 50 37 50 do do John Brennan. 26 do 1 50 39 00 do do James O. Rose. 2 do 1 50 1 50 39 00 do do James O. Rose. 2 do 1 50 1 50 1 50 28 50 do do Jas. Reynard. 1 do 1 50 28 50 26 Team. do C. Penbrook. 18½ do 3 50 64 75 3 50 Mason. do Wm. Chandler. 2 do 1 75 3 50 64 75 Turner. do Alex. Gault. 2 do 3 00 6 00 Carpenter. do F. T. Walton. 26½ days. 2 75 72 88 do do S. R. Bradley. 26½ do 2 00 53 00 do M. H. Dunn. 26½ do 2 00 53 00 do W. H. Dunn. 26½ do 2 00 50 00 do <th< td=""><td>do</td><td></td><td></td><td></td><td>1 50</td><td>40 50</td></th<>	do				1 50	40 50
do do John Brennan 26 do 1 50 39 00 do do James O. Rose 2 do 1 50 9 00 do do Jas. Reynard 1 do 1 50 28 50 do Jerry Langhey 19 do 1 50 28 50 Mason do C. Penbrook 18½ do 3 50 64 75 Mason do Wm. Chandler 2 do 3 00 60 Turner do Alex. Gault 2 do 3 00 60 Carpenter do F. T. Walton 26½ do 2 00 53 00 do do D. S. Walton 26½ do 2 00 53 00 do do W. H. Dunn 26½ do 2 00 53 00 do do E. Smith 25 do 2 00 53 00 do do W. Wilkerson 24 do 3 00 50 00 do do F. T. Walton 26½ do 2 00 51 50	d o				1 50	37 50
do	do				1 50	39 00
do	d o	do	James O. Rose	2 do	1 50	9 00
Team do C. Penbrook 18½ do 3 50 64 75 Mason do Wm. Chandler 2 do 1 75 3 50 Turner do Alex. Gault 2 do 3 00 6 00 Carpenter do F. T. Walton 26½ days 2 75 72 88 do do S. B. Bradley 26½ do 2 00 53 00 do do W. H. Dunn 26½ do 2 00 53 00 do do W. H. Dunn 26½ do 2 00 53 00 do do W. H. Dunn 26½ do 2 00 53 00 do do W. H. Dunn 25½ do 2 00 50 00 do do W. J. Hill 25½ do 2 00 51 50 Mason & Co. do W. Wilkerson 24 do 3 00 72 00 Masor & Co. do W. Wilkerson 26½ do 1 50 33 75 Laborer do F. T. Walton 26½ do 1 50	d o	do	Jas. Reynard	1 do	1 50	1 50
Mason do Wm. Chandler. 2 do 1 75 3 50 Turner do Alex. Gault. 2 do 3 00 6 00 Carpenter do F. T. Walton. 26 days. 2 75 72 88 do do S. R. Bradley. 26 do 2 00 53 00 do do D. S. Walton. 26 do 2 00 53 00 do do W. H. Dunn. 26 do 2 00 53 00 do do E. Smith. 25 do 2 00 53 00 do do E. Smith. 25 do 2 00 53 00 do do S. J. Hill. 25 do 2 00 50 00 Mason & Co. do W. Wilkerson. 24 do 3 00 72 00 Horse and waggons. do F. T. Walton. 26 do 1 50 39 75 Laborer. do Arthur Bradley. 22 do 1 50 33 00 do do Pat Griffin. 23 do	do		Jerry Langhey	19 do	1 50	28 50
Turner do Alex. Gault 2 do 3 00 6 00 Carpenter do F. T. Walton 26½ days 2 75 72 88 do do S. R. Bradley 26½ do 2 00 53 00 do do D. S. Walton 26½ do 2 00 53 00 do do W. H. Dunn 26½ do 2 00 53 00 do do E. Smith 25 do 2 00 50 00 do do S. J. Hill 25¾ do 2 00 51 50 Mason & Co. do W. Wilkerson 24 do 3 00 72 00 Horse and waggons do F. T. Walton 26½ do 1 50 39 75 Laborer do Arthur Bradley 22 do 1 50 39 75 do do Pat Griffin 23 do 1 50 34 50 do do Robert 12 do 1 50 37 50 do do Robert 12 do 1 25 <					3 50	64 75
Carpenter do F. T. Walton 261 days 2 75 72 88 do do S. R. Bradley 266 do 2 00 53 00 do do D. S. Walton 266 do 2 00 53 00 do do W. H. Dunn 266 do 2 00 53 00 do do W. H. Dunn 266 do 2 00 53 00 do do E. Smith 25 do 2 00 50 00 do M. J. Hill 255 do 2 00 51 50 Mason & Co do W. Wilkerson 24 do 3 0 72 00 Horse and waggons do F. T. Walton 261 do 1 50 39 75 Laborer do Arthur Bradley 22 do 1 50 33 00 do Pat. Griffin 23 do 1 50 34 50 Carpenter do Robert 12 do 1 50 37 50 do do Robert 12 do 1 25 15 00				2 do		3 50
do do S. R. Bradley 261 do 2 00 53 00 do do D. S. Walton 266 do 2 00 53 00 do do W. H. Dunn 262 do 2 00 53 00 do do E. Smith 25 do 2 00 50 00 do do S. J. Hill 25 do 2 00 51 50 Mason & Co do W. Wilkerson 24 do 3 00 72 00 Horse and waggons do F. T. Walton 261 do 1 50 39 75 Laborer do Arthur Bradley 22 do 1 50 33 00 do do Pat. Griffin 23 do 1 50 34 50 Carpenter do Ira Bessey 25 do 1 50 37 50 do do Robt. Harris 14 do 1 25 15 00 do do E. Webber 12 do 1 25 15 00 do do Jas. Blott 6 do 1 25 <t< td=""><td>-</td><td></td><td></td><td></td><td></td><td></td></t<>	-					
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do do S. J. Hill. 25\frac{3}{4} do 2 00 51 50 Mason & Co. do W. Wilkerson. 24 do 3 00 72 00 Horse and waggons. do F. T. Walton. 26\frac{1}{2} do 1 50 39 75 Laborer. do Arthur Bradley. 22 do 1 50 33 00 do Pat. Griffin. 23 do 1 50 34 50 Carpenter. do Ira Bessey. 25 do 1 50 37 50 do do Robt. Harris. 14 do 1 50 21 00 Laborer. do E Webber. 12 do 1 25 15 00 do do Jas. Blott. 6 do 1 25 7 50 do do Jas. Heffrew. 25 do 1 25 31 25 Team do R G. Murdy. 14 do 2 50 35 00						
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do do Jas. Blott. 6 do 1 25 7 50 do do Wm. Hamilton 6 do 1 25 7 50 do do Jas. Heffrew 25 do 1 25 31 28 Team do R G. Murdy 14 do 2 50 35 00		1 .				
do Wm. Hamilton	do					7 50
do	do					7 50
Team	do	do	Jas. Heffrew	25 do		31 25
	Feam				2 50	35 00
	Carpenter	do			2 00	4 00

Accounts chargeable to Welland Canal-Renewals and Repairs.

D	ate.	Nature of Work.	Amount.	Total.
	87.	The Company of the Co	\$ cts.	\$ cts.
Oct.	1-31	To Coy Bros., St. Catharines— 5 gals. turpentine, at 75c., \$3.25; 135 lbs. putty, at 4c., \$540	9 15	
	[6 irons metallic oxide, at \$1.50	9 00	
		100 lbs. white lead, \$7.50; 2 kegs cut nails, at \$3.50, \$7 5 lbs. glue, at 25c., \$1.25; 15 lbs. shingle nails, at 5c, 75	14 50 2 00	
		7 pk. finishing nails, at 15c., \$1.05; 7 gross assorted	3 23	
		screws, \$2.18	9 16	
		44 gals. raw oil, at 75c., \$33; 4 oil taps, \$4 5 lbs. 3 in. cut nails at 15c., 75c.: 2 lbs. 1 in. cut nails, 25c	37 00 1 00	
		20 lbs finished nails at 10c., \$2; \(\frac{1}{2}\) doz. car bolts, 10c 6 pair trap hinges at 20c., \$1.20; 2 pair T hinges, 30c	2 10	
		6 pair trap hinges at 20c., *1.20; 2 pair T hinges, 30c 2 pair B. D. rollers at 75c., \$1.50; 100 lbs. red lead, \$4.50.	1 50 7 00	
		2 lbs. lamp black, 60c.; 300 lbs. oakum, at loc., \$30	30 6 0	
		1 centre bin, 75c.; 1 empty can, 20c	45	126 69
∙do	1–31	James Wilson, Thorold—	2.42	-20 00
		6 lbs. brimstone, at 15c., 90c.; 1 pair pinchers, \$2.50 1 hammer, 50c; 3 lbs. brimstone, 45c	3 40 95	
		12 lbs. nails, at 4c, 48c.; 1 pair hinges, 15c.; screws, 5c.	68	K 0.9
do	1-31	Wm. N. Garden, Welland-		5 03
		Paid carting bridge mechanic's tools to Humberstone 2 lbs. nails	1 50	
				1 60
Oct.	1-31	John Mathews, Port Colborne— 125 lbs. nails, at 4c., \$5; 15 lbs. yellow ochre, at 5c.,	ļ	
	2-01	75c.; 150 lbs. white lead, at 7c., \$10.50	16 25	
		12 gals. bolled oil, at 80c., \$6; 25 wire nails, at 6c., \$1.50; ½ lb. blue, 15	7 65	
		7 pair butts, at 8c., 56c; 3 rim locks, at 40c., \$1.20; 3		
		knobs, 60c	2 36	
		5 lbs. Venetian red, 25c	1 93	
		½ gal. turpentine, 40c.; 24 lights glass, 1.68; 17 lbs. putty, 85c	2 93	
		Sand paper, 10c.; 2 files, 20c.; 6 bolts, 25c.; 1 pail, \$1.72.	2 27	
		1 bitt, 26c.; 5½ lbs. hinges, 55c.; chain, 55c.; 2 lbs. B. lumb., 40c	1 71	
do	7	Battle & Smyth, Thorold-25 gals. No. 15 white paint, at		35 10
_		\$1.90		47 50
đo	10	L. J. White, Buffalo—12 knives made to pattern, at \$2.50 J. G. Demare, Port Dalhousie—	;	30 00
do	1-31	Paid freight on barrel paint from Thorold	0 35	
do	11	2 railway tickets and return, also freight on diving apparatus and express charge on package knives from	Į.	
do	12	BuffaloFrieght on diving apparatus from Thorold	5 45 1 00	
ųυ	13			6 80
do	1	Grand Trunk Railway Co., Port Colborne— Freight on tools to St. Catharines	0 91	
do	3	do diving pumps to Thorold	1 40	
do Di Tu	6	do bag grass seed from St. Catharines	0 35 0 35	
do do	3	2 return tickets to Port Dalhousie	2 50	
uu	12		4 00	9 51
ф	1-31	Robert Foster, St. Catharines— Horse and waggon, 7 days, with the bridge mechanics, at		
	1-01.,,	\$2.50	17 50	
		Horse and buggy for superintendent, 1 day do do 5 days, at \$1.50	1 00 7 50	
		do do 3 days, at \$2.50	7 50	

ACCOUNTS chargeable to Welland Canal-Repairs-Continued.

Date.	Nature of Works.	Amount.	Total.
1887. Oct. 1–31	To H. Vanderburgh, Allanburgh—24 railway fares to Port	\$ cts.	\$ cts.
July 29 Sept. 20 do 29 do 30	N. Chatfield, St. Catharines— Fare, Port Colborne and return, \$1.50; hotel bed, 35c Meals (Allanburgh)	1 85 0 50 1 50 1 50	F 0F
Oct. 31 do 4–5	B. McGrath, Port Dalhousie—6 meals (for Turner) at 25c Mrs. Jordon, Port Robinson—6 meals, \$1.50; horse feed,		5 35 1 5 0
d o 1–31	75c., for bridge mechanics doing repairs	2 25	2 25
·	27 meals for Diver and Charfield, at 25c	6 75 1 50 2 75	
	McCleary & McLean, Thorold—	2 61	13 61
đo 1–31	1,225 ft. pine, at \$16, \$19.60; 798 ft. pine, at \$17, \$13.57. 333 ft. pine, at \$18, \$5.99; 2,200 ft. pine, at \$30, \$66 396 ft. pine, at \$35, \$13.86 11,723 ft. oak, at \$25 500 ft. moulding, at 1c	33 17 71 99 13 86 293 08 5 00	
do 6	D. Zimmerman, St. Catharines—44 ft. \(\frac{7}{8}\)-in. pine, at \$3 50, \$1.54; 58 ft. moulding, at 1\(\frac{1}{2}\)c., 87c		417 10
Oct. 1-31	James Wilson, Merritton— 212 lbs. castings, at 33c., \$7.42; 3 lbs. steel, at 20c., 60c. 22 do phosphor bronze, at 45c., \$9.90; 30 lbs. brass	8 02	2 41
	nuts, at 30c., \$9	18 90 1 90 21 40	50 22 :
do 1-31	James Wilson, Merritton— 347 plates repaired, at 2c, \$6.94; 1,358 S. bolts, &c., repaired, at 2½c., \$33.95	40 89	00 22
	bolts, at 5c, \$258.80	286 56	
j	\$9.20	11 12	
ļ	Cr.	357 09	
	By 24,319 lbs. scrap iron, at \(\frac{3}{2} \)c	230 38	126 71
do 31	John Bradley, Merritton— Boating, breaking and trimming stone from Humberstone to Lock No. 25, New Canal, 1,556 yards, at \$1.05 Breaking timming and besting the form Humberstone	1,633 80	120 11
Į.	Breaking, trimming and boating stone from Humberstone to Port Colborne, harbor slopes, 613 yds., at 90c	551 70	
j	Cr. By 2 months' hire of scow "Sir Charles," at \$60	2,185 50 120 00	2,065 50
	J. & R. Miller, St. Catharines, material, as follows, sup- plied for putting in water service for fire protection to the workshops, store house, dwelling houses and various buildings situated at Port Dalhousie—		_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Sept. 1-30	445 cubic ft. timber for derrick, at 30c	133 50 288 96 9 55	
	292	٠	

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts.
Sept. 1-30	To J. & R. Miller, St. Catharines— 10 3-inch gate valves, at \$11.50, \$115; 2 12-inch gate		
	valves, at \$3, \$6	121 00	
}	10 3-inch nipples, at 65c., \$6.50; 6 3-inch tees, at 80c., \$4.80; 2 3-inch unions, at \$1.75, *3.50	14 00	
	203 ft. 14-inch pipe cut to length and threaded, at 20c	14 80 50 75	
	201 ft. 1-inch pipe, at 10c., \$20.10; 2 3-inch lock nuts, at	[
	50c., \$1 2 bushings, 90c.; 2 1½-inch lock nuts, 90c	21 10 1 80	
	2 1-inch gate valves, at \$1 50, \$3; 1 1-inch nipple, 15c.;	- 00	
	1 la-inch elbow, 35c	3 50	
	1 bushing, 30c; 1 nipple, 15c.; 1 3-inch tee, 80c 125 ft. 3-inch pipe cut to length and threaded, at 48c	1 25 60 00	
	4 3-inch elbows, at 60c., \$2.50; 3 3-inch elbows, at 60c.		
	\$1.80; 1 31-inch elbow, 60c	4 80	
	4 nipples, at 25c., \$1	4 55	
	1 tee, 30; 7 3-inch nipples, at 65c., \$4.55; 1 3-inch cross,		
	\$1.10 43 rt. 3-inch pipe cut to length and threaded, at 48c	5 95 20 64	
	31 ft. 21 do do 42c	13 02	
	6 3-inch nipples, at 65c., \$3.90; 2 bushings, 85c	4 75	
	2 3-inch elhows, at 60c., \$1 20; 2 do \$1.80 102 ft. 3-inch pipe cut to length and threaded, at 48c	3 00 48 96	
	1 bushing, 40c.; 1 tee, 30c.; 2 locks, \$1	1 70	
	2 14-inch gate valves, at \$2.75, \$5.50; 1 union, 60c.; 1 elbow, 50c	6 60	
	80 ft. 14-inch pipe cut to length and threaded, at 25c	20 00	
. !	4 14-inch tees, at 30c, \$1.20: 1 bushing, 40c	1 60	
ì	10 3-inch hose connections, at \$1.25, \$12.50; 1 3-inch top valve, \$3	15 50	
1	• • •		857 2 8
	Thomas Hastings, St. Catharines, taking down old chimney, cleaning brick, and re-building same and furnishing new material for bridgetender's house,		
Oct. 25-20	Bridge No. 8— 1½ day mason, at \$3.50, \$5.25; 1 day laborer, \$1.50	6 75	
20 20	day teaming	1 25	
3	1} barrel mortar, \$1.50; 90 new bricks, 90c.; 1 thimble,	2 65	
	200	2 00	10 65
do 11-18	Thomas Hastings, St. Catharines, repairing east wall, lower end Lock 6, making good damages done to same by the steamer "Tecumseh," furnishing necessary plant and material—		
ŀ	61 days for mason, at \$4, \$26; 81 days for masons, at		
1	\$3.50, \$29.75	55 75 29 00	
1	4\frac{1}{2} days team, at \$4, \$18; 5\frac{1}{2} days derrick, at \$2, \$11	20 00	
{	\$7.87	16 87	
i	27½ feet new coping, at \$1, \$27.50; 6 barrels cement, at 65c., \$9.90	37 40	
Į,	2 yards sand, at \$1.50, \$3; use of derrick and tools, \$25.	28 00	_1
	Coy Bros, St. Catharines-		167 02
f	4 gallons machine oil, at 65c., \$2.60; 2 kegs cut nails,	Ĩ	
-do 1-31	\$7	9 60	
-do ₹ 1-31	20 the cut neils at 40 800 . 1 D H anger \$4 50. 14		
-do ₹ 1-31	20 lbs. cut nails, at 4c., 80c.; 1 P. H. auger, \$4.50; 14 lights glass, \$1	6 30	
-do ₹ 1-31	20 lbs. cut nails, at 4c., 80c.; 1 P. H. auger, \$4.50; 14 lights glass, \$1		
-do ₹ 1-31	20 lbs. cut nails, at 4c., 80c.; 1 P. H. auger, \$4.50; 14 lights glass, \$1	6 30 10 78	
-do ¥ 1-31	20 lbs. cut nails, at 4c., 80c.; 1 P. H. auger, \$4.50; 14 lights glass, \$1		

Dat	te.	Nature of Work.	Amou	nt.	Total	
188	7.		\$	cts.	\$	cts
Oct. 1	-31	James Wilson, Thorold— 7 files, 75c.; 6 boxes axle grease, at 15c., 90c	1	65		
	}	8 gross screws, at 45c., \$3 60; 22 lbs. nails, at 2½c., 77c.; 4 pair hinges, 40c	4	77		
		putty, 40c	. 2	80		
	1	handles, 30c	20	30		
		19 lbs washers, at 10c, \$1 90; 208 lbs. rope, at 15c., \$31.20; 3 lbs. lath nails, at 5c., 15c	-	25 3 65		
		Henry Mussen, Allanburgh—			66	42
d o 1	L-31	97 lbs. nails, at 4c, \$3.88; 8 butt hinges, at 20c., \$1.60; files, 55c.; 12 lbs. spikes, 66c	(63		
	1	2 gallons boiled oil, at 80c., \$1.60; 11 gross screws, at 25c., \$2.25; 1 gross screws, 30c.; 10 lbs. lath nails, 60c.	ŧ	25		
		Door locks and knobs, \$1.25; 54 lbs. nails, at 5c., \$2.70; 2 paint brushes, 14c.	6	35		
	- 1	13 lbs. putty, at 5c., 65c.; glass, \$1.90; brooms, 55c.; 6 pair butts, \$1.20	4	1 30		
	1	10 gallons roof paint, at \$1.46, \$14; damper, 25c.;		50		
	1.	10 lbs. green paint, at 25c., \$2.50; 2½, at 50c.,				
		\$1.25; 3 hinges, 45cBlack paint, 35c.; sand paper, 5c.; axe handle, 30c.; 2	4	20		
		barrels, 40c]	10		
	l	wall paper, at 7c., \$1.40	2	63		
	1	45 yards border, at 5c., \$2.25	3	3 15	41	7 11
		James Rolston, Dunnville-			72.	
40 1	1-31	112 lbs. cut spikes, \$5.60; 10 lbs. cut spikes, 40c	. (3 0 0		
	İ	steel hammer, \$4.63		5 88		
		38 lbs manilla rope, at 15c., \$5.70; 1 pick, \$1; 1 handle, 25c.; lock, 5c		7 00		
	- 1	2 m. s. files, 40c.; 1 m. s. file, 20c.; 1 maul handle, 25c	(90	, :	
_		10 yds. drafting paper and express charges		85	20	6 55
Oct.	13	Battle & Smyth, Thorold—10 galls. No. 15 paint			19	9 00
Oct.	4	1 bush. potatoe, 80c.; 28 lbs. ham, at 14c., \$3.92; 20 lbs. corned beef, at 6c., \$1.20		5 92		
		5½ lbs. cheese, at 14c., 97c.; 1 box matches, 15c.; bread,		- (.		
		For scow men taking stone to Dartmouth dam.)		1 40	1	7 34
Aug.&	Sept.	Thomas Berrimen, Thorold— 100 bu h. lime, at 25c	2	5 00		
		3½ yds. sand, at \$1.50		5 25	3(0 28
0-4	.,	James Wilson, Merritton—			•	-
Dct.	31	Ironing ice chisels, 800 lbs., at 2c	10	6 00		
] ;	\$2		4 50	2	0 50
Oet. 1	1-30	587 lbs. plates rep., at 2c., \$11.74; 484 lbs. screw bolts	n	3 84	-	
		rep., at 23c., \$12.10		!		
	- 1	4c., \$13.40	1	3 94		
	1	ing, at 6c., \$16.56		4 36 2 00		
	I	Ground auger			22	4 14

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts.
Oct. 1-31 Oct. 1-31	James Wilson, Merritton— 6,313 lbs. castings, at 3½c., \$220.95; 5 lbs. brasses, at 28c., \$1.40	222 35 30 70 94 40 116 00 25 00 107 48	463 45
Oct. 25	\$57 37. 274 ft. pine, at \$20. 9,221 ft. oak, at \$25. 12 bunches lath, at 25c., \$3; 3 cedar posts, at 25c., 75c 20 storm sash for Canal office. W. E. Tench & Son, Chippawa— 500 ft. pine, at \$16, \$9.00; 200 ft. pine, at \$18, \$3.60 128 do \$18, \$2.30; 75 do \$18, \$1.35 107 do	82 51 5 48 230 53 3 75 39 50 12 60 3 65 1 92	494 25
Oct. 18 do 22	F. T. Walton, Thorold— Paid expenses for 5 men and team repairing bridge at Chippawa	6 00 1 20	
Oct. 31	Thomas Grenville, Thorold-31 days painting bridge		7 20
Oct. 31	tenders' houses at Allanburgh, at \$2 Dickinson & Sness, Humberstone— Advance on account of construction of Canal toll collector's office and Custom house at Port Colborne, as per agreement		63 00 800 00
	· ·	ľ	6,352 54

PAY-LIST in duplicate of persons employed on the Dunnville Division of the Welland Canal during the month of October, 1887, to repair the West Pier at Port Maitland, chargeable to Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Carpenter	do do	Jas. Edgar	26 do 26 do 26 do 26 do 26 do 27 do 28 do 29 do 29 do 20 do 20 do 21 do 21 do 22 do 24 do 25 do 26 do 26 do 26 do 26 do 27 do 28 do 28 do 29 do 20 do 20 do 21 do 22 do 25 do 26 do 26 do 27 do	\$ cts. 2 00 1 50 1 50 1 50 1 50 1 50 1 50 1 50 1	\$ cts. 52 00 39 00 39 00 39 00 39 00 39 00 39 00 24 37 24 37 24 37 24 37 24 37 25 39 00 30 00 32 50 32 50 32 50 32 50 32 50 32 51 46 25

ACCOUNTS chargeable to Welland Canal, Repairs.

Names.	Amount.	Names.	Amount.
Jas. Rolston	\$ cts. 72 56 25 75 810 00 104 00 36 00	B. Baxter	\$ cts. 112 50 45 00 273 75 2,840 80 4,320 36

PAY-LIST in duplicate of Persons employed on the Welland Canal, during the month of November, 1887, to pay for laying new floor on shop and putting on new doors, repairing swing and tow lath bridges, hauling, repairing scow out on skids, repairing banks, opening up and clearing out ditches, &c., chargeable to renewals and repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Inspector, &c	do	Robt. Johnston Fred. Woods	26 do 26 do 26 do 20 do 5 do 25 do 25 do 24 do 24 do 24 do 24 do	\$ cts. 75 00 2 25 2 00 2 00 2 00 2 00 2 00 2 00	\$ cts. 75 00 40 50 52 00 52 00 52 00 52 00 40 00 10 00 78 00 57 38 23 50 43 31 43 75 5 00
do do	do do do do do	Alex. McCullough {	4½ do 23 do 2½ do 24¾ do 23¼ do 20 do 26 do 30 do 30 do	2 00 2 00 1 50 2 00 2 00 2 00 2 00 1 50 1 50 1 20 1 00	9 00 9 00 39 50 49 50 46 50 40 00 39 00 45 00 36 00 26 00
Laborer. do do do do do do do do do d	do do do do do do do do do do do do do do do do do do	Wm. Daley Jno. Weaver John Yates Thos. Hayden Geo. Julian Thos. McClelland Joseph Johnston. Geo. Read Jas. Reynard Samuel Fisher	26 do 26 do 14 do 12 do 17½ do 11 do 23 do 26 do 26 do 4 oo 5 do 8 do 8 do 10 do	1 75 1 25 1 25 1 25 1 25 1 25 1 25 1 25 1 2	45 50 33 50 32 50 32 50 32 50 32 50 21 88 13 75 13 75 28 75 39 00 21 00 76 50 15 00 10 00 10 00 10 00 12 50 38 25
Laborer	do do do	R. A. Borth, foreman. G. A. Jordan John Madigan Geo. Brown James Hansel Ben Redfern John Watson 297	24 do 24½ do 24½ do 24½ do 24½ do	1 75 1 50 1 25 1 25 1 25 1 25 3 00	45 50 36 00 30 63 30 63 30 63 30 63 54 00

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c. - Continued.

Capacity. Divisions Nos. 3 and 4.			n yed	Names.	T	ime.	Rat	e.	An	nour	ıt.
							\$	cts.		\$	cts
aborer		Nov., 1	887	Jas. Clancey, foreman	26	dars	1	75		45	00
do	•••••	do	•••		$23\frac{1}{2}$	do		25	1		38
do do	••••••	do	•••	Michael Blake	24			25			63
uo	Division No. 4.	do	•••	Wm. Pew	242	do	1	25		30	63
						l			ĺ		
	•• •••••	do	•••	Wm. Cook, foreman		do		75	İ		50
go .	•••••••••••	do	•••	Jacob Cook	26	do		25		32	50
do	***************************************	do	•••	Wm. Deeks	17	do		50 25	}	34	75
do	•••••••••••••••••	do	•••	C. Keen	26	do		25	,	32	50
do	••••••	do	•••	Jas. Leslie	26	do		25			50
do	• ••••••	do	•••	J. Mahagan	26	do		25	i	32	50
do do	***************************************	do	•••	M. Anthes	26	do		25	į		50
do	***************************************	do	•••	G. Pity	26	do		25	l		50
do	***************************************	do	•••	J. Moyer		do	1	25 25	l		50
do		do	•••	Wm. Mumis		do		00	ĺ		50 00
l'eam	***************************************	do	•••	Sam. Cook		do		00			50
Ass ista	nt Ferryman	do		John Bradley, Jr		do		50	ĺ		00
	ter	do		N. Morey, foreman	28	д о	2				00
do	***************************************	do	•••	P. Shortell	28	do	2	00		56	00
do		do	•••	S. Radcliffe		do	2	00	ļ	56	00
do	***************************************	do	•••	T. Rapsey	$27\frac{1}{2}$	do		00			00
Watchn	aan	00	•••	Chas. Hill	231	do		00			50
		do	•••	J. W. Boyle	30	do		. 00			00
do	***************************************	do	•••	T. O'Neil, foreman Robt. Wilson	10	do	-	75			13
go,	***************************************	do	•••	Geo. Wilson		do		. 25 . 50	i		78
go.	******	do		Wm Chandler		do		25		_	88
do	***************************************	do	•••	Jno. Himphill	li#	do		25	l		. 88
_ do		do		Richard Grant		do		00	l		00
	ter	do	•••	F.T. Walton, foreman	28	do	2	75			00
do do	***************************************	do	•••			do	2			56	00
do	***************************************	do	•••			do		00			00
do	**************************	do	•••	E. Smith		do		00			3 00
		do	•••	W. H. Dunn		do		00			00
Labore	r	do	•••	W. Wilkerson		do	_	00			0
do		do		A. Bradley		do		. 25 . 25	l		8
do	***************************************	do	•••	Patrick Griffin	16	do		25			0
do,	***************************************	do		Jas. Gunning	61	do		25			3 1
do		do	•••	Jas. Ward	64	do	1	25			3 1
do	••••••	do	•••			do	1	25	1	5	0
do	***************************************	do	•••			do]	25	l	3	7
do	***************************************	₫ o	•••	Wm. Clarke	23	do]	25	1		7
Toren e	ind waggon	do		Chas. Murray		do		00	ì		1 5
horre		do		F. J. Walton		do		50	l		5
do	*******************************	do	•••	Jas Hamilton	3	do		75	l		2
	••••••••••••••••••••••••••••••••	do	•••	A. Bradley Chas. Tenbrock	7	do		75			0
	Feeder Canal.				l		: * -				
arpen	ter	do		Jas. Edgar	61	40		72	1	14	. ~
do		do		Ita Bessey				. 75 . 50	1		8 1
ďο	******************************	do		Jas. Crawford		do		.50	1		5 7 5 0
đo	***************************************	do		D. Cooper		do		50	l		30
do	••••••	do		Chas. Fritz		do		50	1		, o
do	***************************************	do		J. Mathews, A. B		do		50			2
	***************************************	do		E. F. James		do		50	1		5
	·	do	•••	John Trush		do		50	1		7
do	***************************************	do		E. D. Webber	52	do		25	ł		3 2

PAY-LIST in duplicate of Persons employed on the Welland Canal, &c .- Continued.

Capacity.	Capacity. When Employed		Time.	Rate.	Amount.	
Laborer	do do do do	Jas. Heffernan Wm. Bessey Thos Bessey R. Runchey James Davis B. Bennett M. A. Smith R. G. Murdy	11½ do 5 do 5 do 5 do 7½ do	\$ cts. 1 25 1 25 1 25 1 25 1 25 1 25 1 25 1 2	\$ cts. 19 38 14 38 6 25 6 25 6 25 9 38 31 50 16 50	

Accounts Chargeable to Welland Canal, Repairs.

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts
Nov. 1-3	To Coy Bros., St. Catharines— 100 lbs. C. P. lead, \$7; 2 sash tools, 25c	7 25 13 50 7 60 2 25 4 20 6 35 14 10 0 55 4 41 4 50 3 15 1 25 8 75	
- đo 1–3 0	6 bales oakum, \$33; 1 gal. knotting, \$3	5 15 3 00	11 6 3 6
- do 3 -10	W. N. Gardner, Welland-	0 10 0 50 0 50	8 25 1 90
∙ do 1–30	John Mathews, Port Colborne— 2 14 ft. oars, 28 feet	3 50 2 75 3 85 1 91 1 78 3 80 2 30 0 76 0 59	21 24
Oct. 5 Nov. 30		3 50 5 26 2 85 6 50 3 30 2 25 1 65 3 60 0 50	

D٤	ate.	Nature of Works.	Amount.	Total.
18	87.		\$ cts.	\$ cts
Nov.	30	To S. P. Gourley, St. Catharines — 27 ft. pipe, \$3 78; 1 bill top, 50c.; 125 lbs. stove casting,		
		\$10	14 28 11 00	54 69
do	18	John Dale, Montreal— 1 American rubber cloth diving dress 1 rig	50 00 0 50	01.09
Sept.	1	James Thompson, Thorold-		50 50
		Funnel, 15c.; pipe, 15c.; joint pipe, 15c.; elbow, 35c.; 4 micas, 24c	1 04 1 05	
		Damper, 25c.; taper elbow, 25c.; cook stove, \$5; time, 20c	5 70	
		Lifter, 16c.; 2 pots, \$1.60; 2 pipes, 30c.; round elbow, 35c.; lamp, 35c.; spout in order, 15c	2 90	
		Railway lamp and oiler, 35c.; 50-ft. trough, at 10c., \$5; 23-ft. conductor, at 10c., \$2 30; 6 3-in. elbow, 90c.	8 55	
		28 ft. 2-in. conductor, at 8c., \$1.24; 3 elbows, 39c.; 6 sheets tin, 60c	3 23 0 75	
		10 ft. 3 in. cond. pipe, \$1; 5 elbows, 75c.; coal, solder and acid, 40c	2 15 1 88	
	J	Repairing 2 lamps, \$2.50; lining sink, \$2; repairing cond. pipe, 40c	4 90	
		galv. pipe, 30c	5 25 1 50	
3 7		Arch. McIndoe, Thorold-		38 . 9 0
Nov.	31	2 new sheeves for new block Repairing block	3 00 1 00	4 00
do	1-30	Robert Foster, St. Catharines— Horse and buggy	1 00	4 00
		do 2 daysdo 5½ do	5 00 7 50	
Sept.	23	Wm. J. McCoppin, Welland-16 meals, at 25c., \$4; horse		13 50
ďо	1-30	feed, \$1.75	***************	5 75
Oct.	15	W. A. Bonaberg, Port Colborne-Building chimney higher,		16 80
Dec.	1	furnishing brick and mortar over house	•••••	5 00 45 00
Nov.	30	B. McGrath, Port Dalhousie—4 loads manure	***************************************	4 00
do	30	30½ squares heavy iron roofing with tarred felt for same, at \$4.80. Putting same on octagon tower and round tank and roof,	145 20	
	İ	at 75c	22 69	
		valves, all complete, including fixtures	190 00	357 89
do	1-18	Buffalo Rubber Co, Buffalo— 3 prs. men's tight boots, at \$3 80	11 40	20. 00
		6 do hip boots, at \$3.80	22 80 19 50	
do	17	Grand Trunk Railway Co., Port Colborne— Freight as per original	3 90	53 70
	1	Express charges	0 25	4 15

D	ate.	Nature of Work.	Amount.	Tota	1.
1887.			\$ cts.	s	cts.
Nov.	30	To D. G. Rowan, St. Catharines—Hollow quoin coping. 6 ft. 6 in. x 6 ft. 9 in. x 2 ft. 87 ft. 9 in. x 2 ft. 175 ft. 6 in.,	•		
do	5	\$1.25 To Dickinson & Sness, Humberstone— Building canal toll collector and customs office, Port Colborne	3,280 10 9 00 10 00 86 75 2 99 8 50 34 00	21	9 37
		\$2.50, \$10 43 feet double verandah 29 days extra work on wainscotting, hanging transoms and door, at \$2.25. Ventilator flue for sink, \$4; 2,000 brick, at \$7, \$14 Laying 3,600 extra brick in vault. Changing stovepipe hole, \$3; door cap stone, \$3.75 Bricking up doorway in baggage room. Cut stone for base of verandah Extra labor in piers, \$4; 1 truss comp. in, \$25	18 75 141 90 65 25 18 00 18 00 6 75 2 00 6 00 29 00		
		By 289 feet base, and labor on same, at 9c\$ 26 01	3,736 89		
July Nov.	22 24	50 do do 5c 2 50 1 stairs, \$15; 1 counter, customs house, \$40			
			3,400 31	33	5 58
do	30	Mathew Flannery, Thorold— Painting and lettering 2 signs, door letters do re-lettering 2 signs	18 00 9 00		
đo	8	Thomas Hastings, St. Catharines—Mason time rebuilding stone pier at Port Dalhousie, gate yard tuilding— 12 days 2 masons, at \$3.50 Horse and waggon, \$1.25; 1 barrel cement, \$1.50	5 25 2 75		7 00
do	1-30	James Wilson, Merritton— 1,301 lbs. castings, at 34c	45 53	;	8 00
đo	1–30	28 lbs. new steel, at 20c	5 60 0 30 13 80 12 40 19 06 117 20 3 70		
		33 lbs. new steel, at 20c	6 60 2 00 6 13 4 35	99	ተል ያ
		Old Welland and Feeder Canal.		45	6 67
Nov.	1-30	To Coy Bros., St. Catharines— 7 boxes glass, at \$2, \$14; 79 lbs. putty, at 4c., \$3.16; 7 doz. iron bolts, \$1.05. 20 lbs. steel wire rope, \$3.60; 1 lb. whiting, 5c.; 4 kegs cut nails, at \$3.50, \$14.	18 21 17 65		

Date.		Nature of Work.	Amount.	Total.
188	37.	To Coy Bros., St. Catharines—	\$ cts.	\$ cts.
Nov. 1		1 piece chain, 50c.; 1 paper points, 10c.; 2 sheets sand		•
		paper 4c	0 64	
		thimbles, 50c	4 25 1 15	
		2 pair double acting hinges, at \$2.75	5 50 0 75	
		•		48 15
do I	1-30	James Wilson, Thorold— 25 lbs. putty, at 5c, \$1.25; 6 rim locks, at 70c., \$4.20;		
		6 knobs, at 15c., 90c	6 35	
		staple, 5c	1 50	
		5 lbs nails, 18c.; 2 thumb latches, 20c.; 1 pair hinges, 15c.; 3 thumb latches, 30c	0 83	
		1 gross screws, 4 c.; 6 pair hinges, at 15c., 90c.; 1 gross screws, 45c	1 75	
		1 paper points, 8c, ; 25 lbs. manilla rope, at 15c., \$3.75;	ł	
	!	2 pair S hinges, 305	4 13	
		nails, \$1.50; 1 can drop black, 35c	4 15	
		files, \$1.50; 12 doz. washers, 15c	5 35	
		1 lantern, 75c.; 1 gal. coal oil, 25c.; hooks and staples, 15c.; 100 lbs. nails, \$3.50	4 60	
		930 lbs. spikes, at 5c., \$46.50; 4 door bolts, 50c.; 3 lbs. nails, 12c.; 24 lbs. chain, \$1.20	48 32	
		80 rolls wall paper, at 12½c	10 00	
		Henry Mussen, Allanburgh-		86 98
do	1-30	1 hook, 5c.; matches, 13c.; 1 roll wall paper, 13c 7 lbs. whiting, 25c.; ½ lb. glue, 13c.; 3 lights glass, 21c.	0 31 0 59	
		j 23 yards border, at 5c., \$1.15; 4 rolls wall paper, at 7c.,	i	
		Condon & Hall, Dunnville—	1 43	2 33
.do	1–30	1 gal. raw oil, 75c.; 1 gal. turpentine, εθc.; 3 lbs. putty,	1 67	
		5 sheets sand paper, 5c.; 25 lbs. whiting, 75c.; 2 lbs.		
		glue, 45c	1 25	
		gammy, 35c	3 30	
		chrome yellow, 75c	1 05	
		50 lbs. white lead, \$3.50; 1 lb. patent dryer, 15c.; 1 lb. English vermillion, 50c	4 15	
		James Rolston, Dunnville—	0 90	12 32
do	1-30	2 panes glass, 12x14, 16c.; 1 sledge handle, 25	0 41 6 86	
		Castor oil, 18c.; 267 lbs. round iron, \$6.68	1 30	
		McCleary & McLean, Thorold -		8 57
do	1-30	516 feet pine, at \$16, \$8.26; 800 feet pine, at \$17.50, \$14 482 do 25, \$12.05; 169 do 35, \$5.91	22 26	
		90 feet moulding, at \(\frac{1}{2}\)c., 68c.; 406 feet moulding, at 1c.,		
		50 feet moulding, at 2c., \$1; 16 feet moulding, at 3c.,	4 74	
		48c	1 48	
		70 feet moulding, at 4c	2 80	
		at 25c., 50c	2 40	
		posts, \$2	7 45	
		410 feet piling, at 15c	3 25 61 50	
		303	•———	123 8

Da	ite.	Nature of Work.	Amount.	Total.
15	887.		\$ cts.	\$ cts
Oct.	7	To James O. Rose, Humberstone—		Ψ σισ
		lb. tea, 30c.; sugar, 25c.; 6 lbs. butter, \$1.50; bread, 50c gallon oil, 15c.; rope, 50c., (for men boarding on	2 55	
		repairing scow)	0 65	3 20
				3 40
Nov.	30	J. W. Keating, Agent, Liverpool and London and Globe Ins. Co., St. Catharines—Premium on insurance		
		policy, Government lifting scow	•••••••••••••••••••••••••••••••••••••••	20 00
do	30	Geo. Killins, Dunnville—		
		3 cant hooks and handles, at 40c	1 20 4 50	
		3 new sides for wheelbarrows, at 50c	1 50	
		2 pair white ash oars, \$3; 3 sledge handles, 60c	3 60	10 80
đo	26	R. G. Murdy, Dunnville-4 cords stone, at \$4.50		18 00
do	30	A. H. Bradley, Merritton-430 yards stone for repairing		
		apron abové dam, at \$1	į į	430 00
do	30	Thomas Grenville, Thorold—32 days painting, glazing, and papering lock tenders' houses, Lock 15 to Allanburgh,		
		at \$2		64 00
do	15	Geo. Gibson, P.L.S., St. Catharines-		
		Survey Mrs. Marr's property, part lot 222, Thorold Town- ship		
		Expenses, fare on cars and hotel bill	1 00	
do do	18 1–21	Plan of Mrs. Marr's property	5 00	
		Catharines, at Niagara St. Bridge, and making plan		
		0. 50.120		18 00
Oct.	1	James Hamilton, Merritton-		
		Paid 2 men 1 day each for loading scow with stone, at \$1.50	3 00	
		½ cord wood, \$2; bread and cabbage, 50c. (For board-		
		ing men)	2 50	. 5 (
do	15	W. A. Walker, Thorold-8 yards sand, at \$1.25 (For		
		Allanburgh houses)		10 00
_		To Welland Vale Manufacturing Co., St. Catharines-		
Oct.	21-25	2 wedges and repairing	1 75 9 42	
		, , , , , , , , , , , , , , , , , , , ,		11 17
		James Wilson, Merritton-		
Nov.	1–30	705 lbs. bolt's repaired, at 2½c., \$17.62; 15 lbs. rag bolts, at 3c., 75c	18 07	
		425 plates and bands, at 4c., \$17.00; 1.906 screw bolts.	1	
		at 5c., \$94.30	112 30	
		\$11.80	14 92	145 29
		James Wilson Manuittan		110 40
do	1-30	James Wilson, Merritton— 2,040 lbs. casting, at 31c., \$71.40; 55 lbs. brasses, at 30c.,		
		\$16.50 58 hours drilling and fitting	87 90 23 20	
		301		111_10

Date.	Nature of Work.	Amount.	Total.
1887. Nov. 1-30	McCleary & McLean, Thorold— 1,000 ft pine, \$10: 56 ft. pine, at \$13.50, 75c.; 2,816 ft. pine, at \$16, \$45.06 125 ft. pine, at \$17.50, \$2 19; 9008 ft pine, at \$18, \$162.14; 64 ft. pine, at \$20, \$1.28 120 ft. pine, at \$25, \$3; 88 ft. pine, at \$35, \$3 08 3,405 ft. oak, at \$25, \$85.13; 952 ft. oak, at \$27, \$25.70; 24 ft. oak, at \$28, 67c	\$ cts, 55 81 165 61 6 08 111 50	\$ cts.
do 1-30	8 cedar posts, at 25c., \$2;3 oak posts, 75c.; 1 sash, 32c.; 2 cellar sashes, 70c	3 87	342 87 10 00 3,110 47

PAY-LIST in duplicate of persons employed on the Welland Canal during the month of December, 1887, to pay for furnishing new store shed, Port Dalhousie, laying up repair scows, hauling out scow "Sir Charles" and blocking her up, constructing new ditches and clearing out old ditches, &c., chargeable to Renewals and Repairs.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Inspector Carpenterdo		H. Vanderburgh G. C.Holmes, foreman Wm. M. Jones	27 days	\$ cts. 75 00 2 25 2 00	\$ cts. 75 00 60 75 26 00
dododo	do	Jas. Hindson	14 do 14 do	2 0) 2 00 2 00	28 00 28 00 26 00
do	do do do	Alf. Coons	27 do 1½ do 13 do	2 00 2 00 3 00	54 00 3 00 39 00
Watchman do do do	do	Oscar Sharp	31 do 15 do	1 50 1 20 1 00	46 50 37 20 15 00
Carpenter and handy man	do do do	1	13 do 2 do	2 25 2 00 2 00 2 00	47 25 26 00 4 00 3 00
do do do do	do	John Bowman R. Johnston	1½ do 13 do	2 00 1 75 1 75	3 00 22 75 19 25
do do do do do do	do	Isaac Johnston Fred Woods	10½ do 15 do	1 75 1 75 1 50	3 50 18 38 22 50
do do do do do do	do	Samuel Houston	9 do 3 do	1 50 1 50 2 00	6 00 13 50 6 00
Painter Teamdo	do do	Wm. McNulty Robt. Hoorer	2 do 2 do		41 00 6 00 6 00
do	. do	Conl. Read	25 do 25 do	1 200	47 25 31 25 31 25 31 25
do	., uo	30 5	. 25	1 23	1 31 40-

PAY LIST in duplicate of persons employed on the Welland Canal, &c. - Continued.

Capacity.	When Employed	Names.	Time.	Rate.	Amount.
Laborer	do do	Wm. Daley John Gates Thomas Hayden Peter Paxton John McGeachie Robt. Secord Thos. McClelland James Whitten John Cushman Samuel Hopkins Conl. German Wm. Altoft Chas. Newbold Michael Hayden	21 do 25 do 21 do 110 do 12 do 12½ do 12½ do 11 do 13 do 12¼ do 12¼ do 12¼ do 12¼ do 12¼ do 12¼ do 12¼ do 13 do 12¼ do 15 do 15 do 16 do 17 do 18 do	1 50 1 25 1 25 1 25 1 25 1 25 1 25 1 25 1 25	34 50 26 25 31 25 31 25 12 50 15 00 15 63 15 00 13 75 16 25 16 25 16 30 16 25 16 25 16 25 16 25 16 25 16 25 17 00 18 25 18 25 18 30 18 25 18 30 18 25 18 30 30 75
Division No. 4. Carpenter	do do do do do	Wm. Cock, foreman Jacob Cook Wm. Deeks J. Moyer J. Leslie H. Brennan Jno. Bradley Samuel Cook	12 do 3½ do 3½ do 1 do 1 do 19 do	2 00 1 25 1 25 1 25 1 25 1 25 1 25 1 50 3 00	52 00 15 00 4 38 4 38 1 25 1 25 28 50 15 00

PAY-LIST in duplicate of Persons employed on the Old Welland and Feeder Canal during the month of December, 18 7, to pay for re-building barn and building drive house at end of same, at Canal office; cutting ice from banks, hydraulic race, and opening up ditches, chargeable to Repairs.

Carpenter	Dec.,	1887		1		
Feam Watchman Laborer do do do do Carpenter do do do do do do do do do do do do do	1 3		Ed. Smith	244 do 244 do 144 do 191 do 181 do 181 do 182 do 184 do 185 do 184 do 185 do 19 do 19 do 19 do 19 do 19 do 19 do 10 do 10 do 11 do 11 do 12 do 14 do 15 do 15 do 16 do 16 do 16 do 16 do 17 do 18 do 19 do 19 do 10 do 10 do 11 do 11 do 12 do 14 do	\$ cts. 2 75 2 00 2 00 1 50 3 00 1 75 1 25 1 25 1 25 2 75 2 00 2 00 2 00 1 25 1 25 1 25 1 25 1 25 1 25 1 25 1 25	\$ cts 77 00 49 50 49 50 49 50 49 50 49 00 21 75 58 50 31 00 49 00 19 38 14 38 1 25 7 19 6 25 74 25 38 00 30 00 14 00 6 88 8 13 6 25 5 00 1 25 1 25
do dason	do do do do do do do do		James Edgar Ira Bessey John Thrush Jas. Heffern Jas. Wilson	2½ do 3 do 7 do 6 do 14 do 14 do 14 do 11 do 8 do	1 25 3 00 3 00 1 50 1 50 1 50 1 25 1 25 1 25 3 00 1 00	1 25 7 00 9 00 10 50 9 00 24 50 6 00 17 50 13 75 24 00 2 00

Accounts chargeable to Welland Canal, Repairs.

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts.
	To Coy Bros., St. Catharines—	-	•
_	5 galls. boiled oil, at 75c., \$3.75; 2 galls. turpentine, at 75c., \$1.50	5 25	
į	1 qr. sand paper, 30c.; 45 lbs. carpet felt, at 5c.,\$2.25	2 55	
1	4 lbs. ultra marine blue, at 50c., \$2; ½ doz. shovels, at \$14, \$7.	9 00	
	5 lbs. drop black, \$1.25; 1 carpenter's lock, \$1.25	2 50	
1	1 night latch, Yale, \$2.50; 1 store door lock, \$1.50 2 pr. butts, 38c; 1 doz. shovels, \$14	4 00 i 14 38 i	
	½ doz. M. S. files, at \$5.20, \$2.60; 2 packages cut tacts,		
Į.	10c 2 scrubbing brushes	2 70 0 75	
l l	2 solubbing blusnes		41 13
do 1-31	S. P. Gourlay, St. Catharines—		
1	6 \frac{1}{4}-inch elbows, 30c.; 2 \frac{2}{8}-inch elbows, 10c.; 2 \frac{1}{8}-inch sockets, 10c.	0 50	
	2 %-inch sockets, 10c.; 14 \frac{1}{4}-inch sockets, 60c.; 2 \frac{2}{8}-inch	0.00	
	nipples, 10 cts	9 8 0 ј	
	elbow, 25c.; 2 2-inch nipples, 40c	1 43	
	1 2-inch pipe, 54c.; 10 hours for 2 men, \$4 50	5 04	
	2-inch bushing, 20c; 1 2-inch unions, 55c	6 05	
	11 ft. 2-inch pipes, at 18c., \$1.98; 118 ft. 1-inch pipe, at 10c., \$11.80; 133 ft. \(\frac{2}{3}\) inch pipes, at 9c., \$11.97	25 75	
	132 ft $\frac{1}{2}$ -inch pipe, \$10.56; 497 ft. $\frac{3}{8}$ -inch pipe, at 7c.,		
	\$34.79; 3 2-inch tees, 90c	46 25	
	\frac{2}{8}-inch tees, at 10c., 60c	3 90	
	2 2-inch sockets, at 20c., 40c; 10 1-inch sockets, at 12c., \$1.20; 8 \(\frac{3}{4}\)-inch sockets at 10c., 80c	2 40	
	2 1-inch sockets, 12c.; 13 Universal joints, at 60c., \$7.80;	2 30	
	8 single, at 50c., \$4	11 92	
	3 2-inch elbows, 75c.: 15 1-inch elbows, at 15c., \$2.25; 10 \(\frac{3}{3}\)-inch elbows, \$1	4 00	
	2 \frac{3}{4} inch elbows, 10c.; 2 2-inch unions, \$1.10; 3 1-inch	2 10	
	unions, 90c		
	\$15.30	16 10	
	18 pipe clips, at 10c., \$1.80; 34 burners and cap, \$4.08 1 1-inch cross, 25c.; 28 lbs. lead pipe, at 10c., \$2.80;		:
* *	2 lamps, \$15	18 05	
	14 lbs. castings, \$1.12; 4 hours' time, \$1.20	2 32	152 4
do 31		4 00	
	1 smoke stack, \$3.50; fitting up, 50c Repairing sink	0 50	
	6 joints pipe, 45c.; 1 elbow, 15c	0 60	
	10 square roofing, at \$5, \$50; 45 ft. ridge pole, at 10c., \$4.50		
	1 round elbow	0 35	
do 1-31	James Wilson, Thorold—		59 9
	1 pr. strap hinges, 15c.; 2 padlocks, 60c.; 2 chains, 50c		
	1 chain, 75c.; 1 lock, 30c.; 6 locks, at 15c., 90c	1 45	2 7
do 1-31			•
	1 lb. glue, 25c.; 3 rolls paper, 30c.; 18 yds. border, a		
	4c., 72c	0 35	
Nov. 29			16
ATUT. AS	W. N. Garden, Welland— Paid as per freight	0 35	1

ACCOUNTS chargeable to Welland Canal-Repairs-Continued.

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts.
Oct. 1-31	To John Mathews, Port Colborne— 1 pkg. brads, 10c.; 1 lb. B. lumb., 75c.; 1 pkg. clouts, 20c.; 1 yd. duck, 30c	0 85	
	1 pt. lard oil, 15c.; 1 lb. manilla, 13c.; 4 lb. staples, 8c.; 1 lb. putty, 5c	0 41	
Dec. 13-31	5 lbs. putty, 25c.; 1 gimlet, 10c.; 1 grs. screws, 35c.; 10 lbs. F. nails	0 79 1 50	
	2 grs. screws, 94c.; 1 grs. screws, 38c.; 1 broom, 30c 24 sheets sandpaper, 45c.; 1 grs. screws, 94c.; 10 lbs. nails, 50c	1 62	
	1 grs. screws, 38c.; 1 grs. screws, 47c.; 2 pr. T hinges, 30c	1 89	
	2 thumb latches, 25c.; 2 doz. screws, 8c.; 5 lbs. white lead, 50c.	1 15 0 83	
	I can yellow othre, 10c.; I paint brush, 10c.; knotting,	1 90	
	10c.; 2 galls. boiled oil, \$1.60	3 02	
	1 cord wood, \$1.25; 1 lb. yellew ochre, 2c.; 1 lb. glue,	1 67	
	2 door springs, 40c.; 2 door springs, \$1.20; 1 pr. butts, 45c	2 05 6 75	
	1 doz. sheets sandpaper, 20c.; 2 lbs. glue, 80c.; 2 pkgs. brads, 25c	1 25 1 65	
	8 cupboard catches, 80c.; 1 doz. 2 in. butts, 90c.; 3 lbs. nails, 12c	1 82	29 15
Dec. 31	Henry Jarvis, St. Catharines— Rent of canvas for Lock 19	2 25	
do 1–31.	E. Riddle & Son, St. Catharines— Repairing roof at canal office	4 75 155 60 0 60	12 65
do 1-31.	James Wilson, Merritton—		160 95
	1,133 lbs. new castings, at 3½c	39 66 5 35 0 80	
	LESS—800 lbs. scrap iron, at 3c	46 01 6 00	40 01
do 1-31.	James Wilson, Merritton— 188 lbs. bolts repaired, at 2½c	4 70	15 52
	\$58.05	63 05	
Oct. 27.	Paul Smith, Port Dalhousie— 15 micas, 90c.; repairing diver's helmet, 50c		72 05
Den 21	Repairing diver's helmet		1 90
Dec. 31.	Fitting up Furnace for Office, Port Colborne— 1 No. 14 Pease Economy steel plate furnace	8 20	

Date.	Nature of Work.	Amount.	Total.
1887.		\$ cts.	\$ cts.
1887. Dec. 31	To Chatfield & Neelon, St. Catharines— Fitting up Furnace for Office. Port Calborne— 1 12 by 12 square register, \$6; frame, \$2.40	\$ cts. 8 40 2 25 2 00 1 80 2 55 1 00 1 90 1 50 5 46 3 82 6 25 2 50 20 29 16 80 4 10 50 75	\$ cts.
July 5 Sept. 19	1	338 22	
Dec. 1-31	2 bell cranks, 20c.; wire, 5c 0 25	2 00 5 27 19 48 33 43 13 34 1 16 7 00 2 05 5 80 9 25 3 75	340 22
June 28 Dec. 3	16 Public's patent gas burners for lighting bottom of locks during repairs, at \$7.75. Services for workshop, Port Dalhousie, labor, as per pay roll. 120 ft. 1\frac{1}{2}-in. gas pipe, at 10c. Yard lamp, \$12; post, \$10; burner, \$1 75. Cock, 60c.; 34 ft. \frac{2}{3}-in. pipe, at 6c., \frac{5}{2}.04. Labor and cartage 3 months' supply gas, yard lamp.	28 00 14 00 12 00 23 75 2 64 4 00 7 50	99 53
do 17	11,100 ft. gas supplied Port Dalhousie shops, as per meter, at \$2 50	27 75	119 64
Dec. 1–3	Coy Bros., St. Catharines— 25 lbs. nails, at 4c., \$1; 1 pt. olive oil, 18c.; 10 lbs. cut nails, 60c	1 78 2 10 1 65 1 80 1 00	8 33

ACCOUNTS chargeable to Welland Canal, etc. - Continued.

Date.	Nature of Work.	Amount.	Total.
1887.	To James Wilson, Merritton—	\$ cts.	\$ cts.
Dec. 1-31	69 screw bolts, at 2½c., \$1.73; 183 lbs. plates, &c., at 4c., \$7.32	9 05	
	6c., \$2.88 88 lbs. new steels, at 20c	23 23 17 60	49 88
do 1-31	James Wilson, Merritton— 225 lbs. new castings, at 3½c	7 88 4 20	
do 19 do 1–31	Richard Leeson, Merritton-1 cord hardwood H. Vanderburgh, Allanburgh-19 railroad fares, Port		12 08 5 50
do 1 - 31	Dalhousie and return, at 70c. McCleary & McLean, Thorold— 4,705 ft. pine, at \$16, \$75.28; 373 ft. pine, at \$17, \$6.84 3,533 do \$18, \$63 59; 410 do \$25, \$10.25. 132 do \$35 306 ft. oak, at \$25 480 ft. elm, at \$17 Dressing basswood	81 62 73 84 4 62 7 65 8 16	13 30
d o 8	W. A. Walker, Thorold—6 yards sand, at \$1.25 D. W. Bixley, St. Catharines—		177 89 7 50
Aug. 3 Nov. 7 Dec. 15	3 lbs. twine, \$1.80; Nov. 7, 32 rolls paper, \$4	5 80 3 15 0 25	9 20
Jan. 1 Dec. 13, 14, 24	Geo. Gibson. P.L S., St. Catharines— Going to Welland re Canal boundaries \$5; expenses, \$1 Staking out ditches, taking levels and making cuttings on same on east side of Canal, between Niagara Street		1
	Bridge and Geneva Street		21 00
Dec. 1	Henry Law, P. L. S., Dunnville— Survey of the boundary line between the Village of Dunnville and the Canal lands on the north side of the Welland Canal Feeder, 5 days, at \$5	}	32 50
			1,472 43

RETURN

(49f)

In answer 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, Esqrs., Civil Engineers, and Capt. P. Cole, Royal Engineers, in the years 1832, 1833 and 1834. Also for Survey and Report of Colin Cannan, Esq., C. E., of a proposed change of location of Cornwall Canal, from Sand Bridge, through Hoople's Creek, to Archibald's Point, with plans, profiles and estimates. Also Reports, Plans and Surveys made by Mr. Clowes, C. E., in 1826.

norandum.)

The reports of Messrs. J. B. Mills and Benjamin Wright, Esqs., Civil Engineers, and Capt. P. Cole, Royal Engineers, in the years 1832, 1833 and 1834; also of Colin Cannan, Esq., C. E., of a proposed change of location of the Cornwall Canal, have been printed, and will be found in the Journals of the House for the years and at the pages as under:—

Appendix to Journal,	1833-34	Pages	196 to 204	Ł
"	1835, No. 7			
"	1836, No. 11			•
"	1836-37		1 to 19)
"	1837-38		134 to 160)
"	1839, pt. 1, vol. 2	"	43 to 81	Ĺ

The report of Mr. Clowes, C. E., in 1826, is not on record in this Department.

CORNWALL, 14th February, 1889.

SIR,—As requested in your telegram of the 13th, I beg to enclose an abstract of the quantities of excavation on the Hoople's Creek line, based on a cross-section.

I am searching through my various boxes of papers, &c., and hope to find a copy of the estimate sent you in 1880, which I think included other items, as land, rip-rap &c., but none for bridge or lock work.

I have the honor to be, Sir, your obedient servant,

TOM S. RUBIDGE.

John Page, Esq.,

Chief Engineer of Canals, Ottawa.

CORNWALL CANAL.

Abstract of Quantities of Excavation on line from Hoople's Creek to Sand Bridge.

	•
	Cubic Yds.
1. Dredging in straightening and deepening channel of Hoople's Creek, including entrance, from station	
0-200' to station $51+80$ '	$257,\!433$
tow-path 19' + bottom	45,749
3. Prism excavation in thorough cut below the level of tow-path	1,380,080
4. Dredging in deepening channel of Sand Creek, from station 160 to 180, at junction with canal	77,986
SUMMARY.	
	Cubic Yds.
Item No. 1	257,433
" 2	45 ,7 4 9
٠٠	1,380,080
4	77,986
Total excavation	1,761,248

TOM S. RUBIDGE.

Cornwall, 14th February, 1889.

Cornwall, 21st February, 1889.

SIR,—Herewith I beg to forward an estimate of the cost of the projected line from Hoople's Creek to Sand Creek, Cornwall Canal enlargement.

The quantities of excavation previously sent you have been revised and adapted for a canal 90 ft. wide on bottom; slopes 2 to 1; berme 10 ft. wide, 13 ft. x bottom; tow-paths 25 ft. wide and 20 ft. x bottom.

The bottom of canal to be 7 ft. below the mitre-sill of Lock No. 21—the guard lock.

In the estimate I have omitted a guard lock and bridges for the two crossings of the "Queen's Highway" or river road, and substituted a structure designed to serve as a bridge and guard gate combined, and to be built at the Nine Mile Road, lots 6 and 7, a convenient position to accommodate the business between the railway station and the old village of Dickenson's Landing and its immediate vicinity.

It is proposed that the Queen's Highway shall be carried along the tow-path, and for which provision has been made in estimate; or if this arrangement should be considered inconvenient at the west end, a new road may be formed across lots from 81, 30 to the intersection of the Nine-mile Road, between lots 12 and 13, with the Queen's Highway.

Should you, however, consider it necessary to provide for a guard lock, and also for additional bridges, their cost is estimated as follows, viz.:—

 Guard lock, including all ordinary items.
 \$115,210

 Guard gate
 "
 34,216

 Bridge
 "
 40,500

I have the honor to be, Sir, your obedient servant,

TOM S. RUBIDGE, Engineer-in-Charge.

JOHN PAGE, Esq.,

Chief Engineer of Canals, Ottawa.

CORNWALL CANAL ENLARGEMENT.

ESTIMATE of Work on projected line from Archibald's Po- Hoople's Creek and Sand Creek.	int t	o Bro	une	ll's Bay,	via
1. Land, minimum width throughout, 350 ft. 145 acre	s. at	\$400	00	\$58,000	00
2 Clearing and grubbing full width of land. 45 acre	s. "	-50	00	2,250	
3. Mucking, under seats of banks 28,000 c. yd	s. "	0	25	7,000	00
4. Earth excavation, in dredging and form-				,	
ing a channel in, and an entrance to					
Hoople's Creek, from Archibald's Point					
to Station 52	. "	0	28	\$1,180	00
5. Earth excavation in prism of thorough	•	Ü		• -,200	•
cut, above the level of tow path (20 ft.)					
including road deviation, etc 90,355 c. yd	a ((0	30	27,106	50
6. Earth excavation in prism of thorough	٥.	U	00	21,100	00
cut, below the level of tow path1,360,329 c. yd	e ((Λ	37	503,321	73
7. Earth excavation in dredging and form-	٥.	v	0,	000,021	.0
ing a channel in Sand Creek, from Station					
160 to and including its connection with					
the canal	. "	Λ	22	16 799	14
the canal	ь.	U	44	16,728	14
8. Rock exeavation, embracing all loose rock	~ ((0	H E	10 5 15	00
found on the section	ь.	U	75	19,545	UU
9. Protection to banks—Station 0 to 180,	D: ((-	00	25 000	00
17,500' x 2 35,000 lin. 1	t. "	1	00	35,000	00
10. Entrance piers, Archibald's Point, includ-	n		00		0.0
ing ice breaker, &c	t. "	52	00	52,000	00
11. Combined bridge and guard gate at Nine-					
mile Road, Station 74, including bridge-					•
tenderer's house, pumping, &c	•••••	• · • • • •	••••	45,399	60
			-	\$837,530	97
Contingencies—10 per cent				83,753	
Continguities to per continuities			· · · · .	00,100	

TOM S. RUBIDGE, Engineer.

CORNWALL, 21st February, 1889.

Оттаwa, 28th March, 1889.

\$921,284 00

SIR,—It is considered proper to state that the survey of what is called Hoople's Creek and Sand Bridge Gully Feeder Line was made a number of years ago, at the request of Dr. Bergin, M.P. for Cornwall.

When the plan was sent in it was, I believe, accompanied by an estimate of the probable cost of carrying out the scheme; but the estimate having been mislaid the resident officer, Mr. Tom S. Rubidge, was requested to furnish a copy, which he did,

along with the accompanying letters.

Relative to this matter, it may be stated that the project appears to have been thoroughly investigated and discussed prior to the works of the Cornwall Canal having been undertaken, fully fifty-five years ago; and, judging from existing circumstances it does not appear to have been looked upon favorably—a result that very few, if any, of those persons whose aim is solely the interests of canal navigation will be at all likely to regret. For its resuscitation now, so far as access to or egress from the canal is concerned, no reason worthy of the slightest consideration can be assigned, beyond that of allowing more water to enter the canal at about two miles below its upper end, consequently affording the means of drawing from a larger surface area; but it should be borne in mind that the canal, under any circumstances, for a considerable distance above Lock No. 20 and for the whole distance— $4\frac{3}{4}$ miles—below it, is and must continue of the ordinary width, so long as economy continues to be an object.

The question of "frazil," however interesting in itself or its effects upon the admission of water at certain times during winter, has nothing whatever to do with canal navigation, which, it is well known, does not begin until the season for such accumulation is past and closes before it occurs. The question, therefore, seems in a great measure to resolve itself into whether it is better to spend nearly a million of dollars for the purpose of pleasing the member for Stormont and Cornwall, or reserve the money for a purpose where it is certain to be productive of a really serviceable and useful effect.

This gentleman, I am credibly informed, in a far-fetched, elaborate oration—specially remarkable for length and want of point—occupied the House of Commons for several hours recently in talking about the Cornwall Canal and its projectors, leaving it to be inferred what a very different state of matters would now exist had they possessed a capacity of foresight, having even a very small share of the keen

penetration claimed for his long range back-sight.

Moreover, that defects in my humble self—intensified by obstinacy—have perpetuated and are continuing to eternize the evils, past, present and future, which he looks back upon in such a way as impels him to bring the matter before Parliament, and although of a different nature to the study of the human frame and system, he feels himself no less capable of fixing definitely the proper course that should be adopted by the Government, irrespective of what others may advise.

It is truly surprising how some men possess facilities for getting at all kinds of knowledge which others, apparently of fully as large individual capacity, are unable to reach satisfactorily, although assisted by training and experience; still, one occasionally meets a phenomenon of this kind that does not wholly collapse when

probed. However, such instances are rare.

From the worthy doctor's elevated standpoint and far-searching vision, he preceives that nothing has been done right, and indeed never can be done satisfactorily on the Cornwall Canal, until the whole management has been taken out of the hands of the Government and placed solely under his enlightened control, or that of a person like him, who can at once deal with valves, roller plates in the bottom, the whole condition of the gates, working of crabs, effects of chain winding upon the systems of lock-men, the position or location of the line—entrances, or whatever is necessary to get the whole into shape and keep everything in the best condition.

I am at a loss to understand in what way I have had the misfortune to incur the

I am at a loss to understand in what way I have had the misfortune to incur the ire, or rather to sink so low in the estimation of a person who appears to possess such unusual views of justice, honor and the characteristics indicated in the speech

previously mentioned.

It may, however, be stated that it is not generally looked upon as a prominent mark of bravery for even a non-combatant officer to attack a person whose hands are tied, or even for a gentleman of the lancet to assail, in the most prominent place possible, the character, professional or otherwise, of one who is absent, or not in a position to answer the charges. Still, in all such cases it is presumed that a great deal depends on the sense of justice, honor and object of the attacking party.

Before closing this letter it may be stated that the vast array of ancient records exhumed for the occasion, and the use made of them and kindred all-but-forgotten matters, has a strong resemblance to juggling with the subject, for the supposed entertainment of those who had sufficient patience to listen to such a bitter, far-fetched onslaught upon an absent person, who had no more to do with them than the worthy doctor had to do with framing the original Bill for the reform of Parliament or with the settlement of the question of the clergy reserves.

It therefore seems as if the statements were made under the impression that the declaimer possessed the proverbial advantage enjoyed by the chimney sweep, of

being fully secure from retaliation in kind.

I have the honor to be, Sir, your obedient servant,

JOHN PAGE, Chief Engineer.

SHEETS' ISLAND CHANNEL

Scale 400 = 1

Engineer's Office
Morrisburg Feby 2nd, 1880

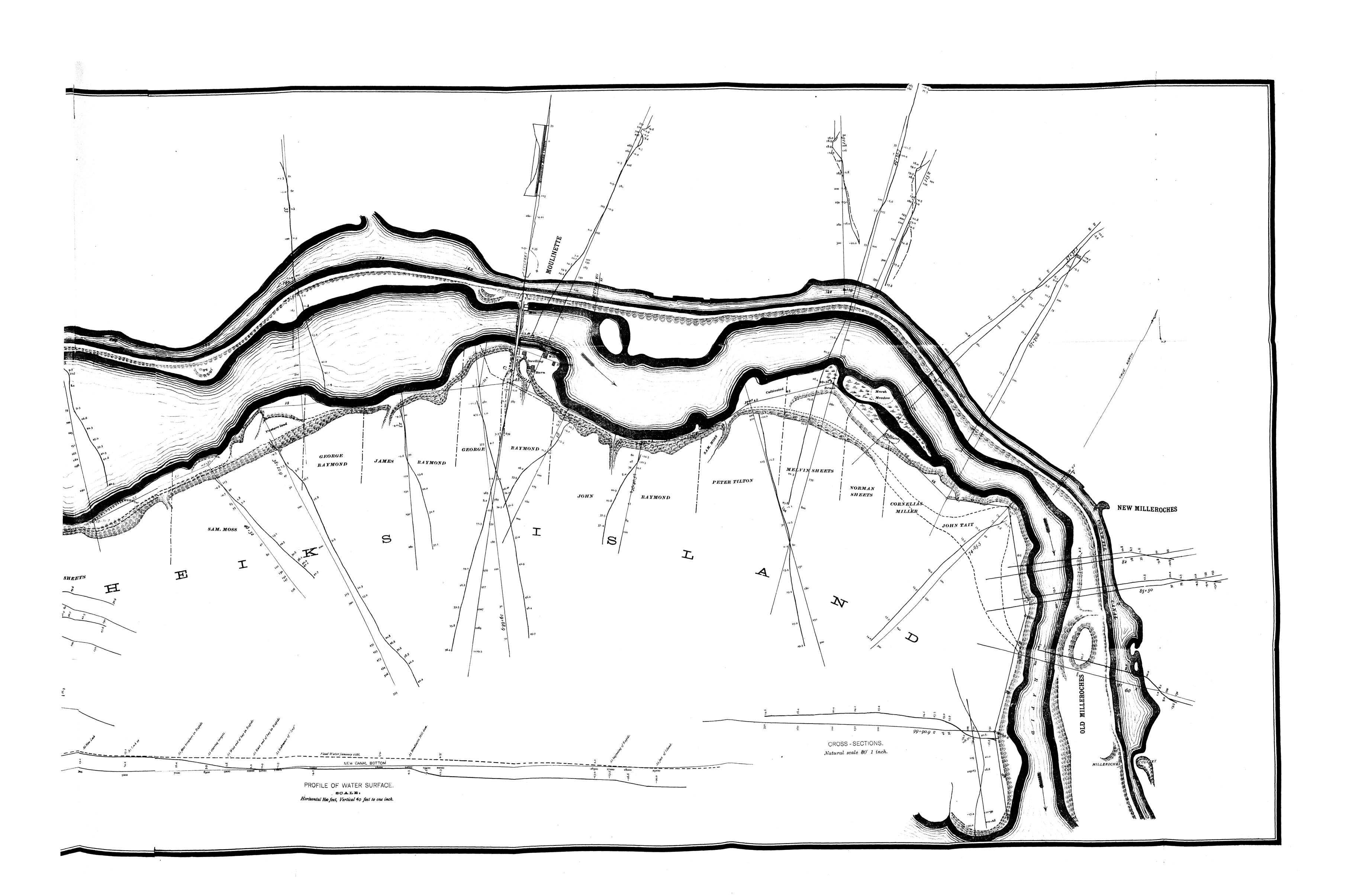
NOTE—In case of forming dams at upper and lower end af "Sny", ordinary water and high water lines on Sheiks Island are shown dotted in black, thus:

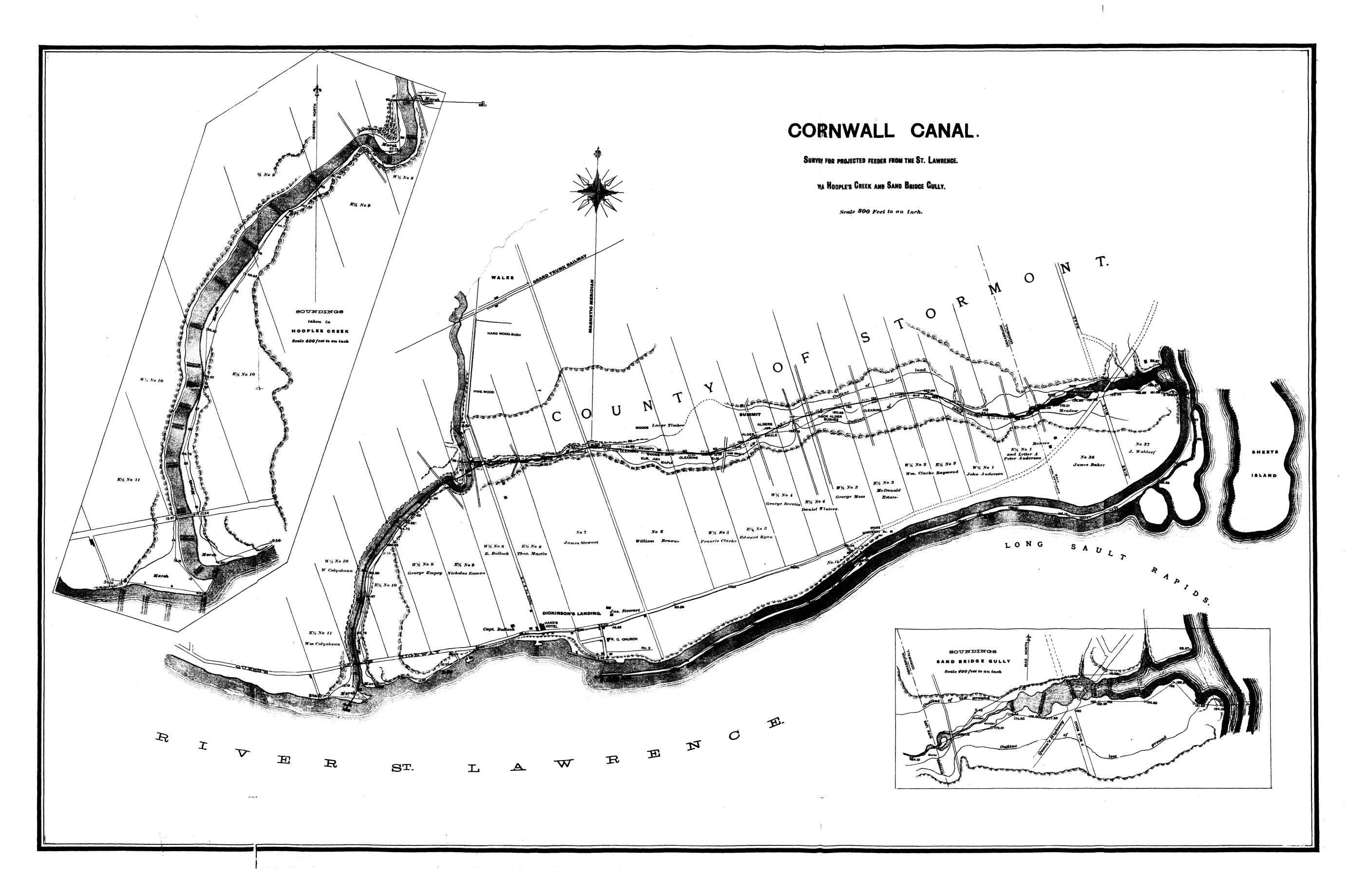
John Sage.

PROFILE OF WATER SURFACE.

SAM. MOSS

JAMES





RETURN

(51a)

To an Address of the House of Commons, dated the 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.

By order.

HECTOR L. LANGEVIN,

OTTAWA, 11th April, 1889.

Acting for the Secretary of State.

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 14th June, 1886.

On a Memorardum dated 9th June, 1886, from the Minister of Railways and Canals, representing that the Chief Engineer of Government Railways has had under consideration the question of the apportionment of the subsidy of \$250,000 per annum, for a period of twenty years, granted by the Acts 47 Victoria, chapter 8, and 48 49 Victoria, chapter 58, in aid of the construction of the Short Line of railway between Montreal and the harbors of St. Andrews, St. John and Halifax, a contract for the completion of the necessary links in which line (the said links being comprised in the distance between Montreal and Moncton) having been authorized by an Order in Ccuncil of the 19th November, 1885, and signed by the International Railway Company on the 14th December, 1885.

The Minister further represents that the Chief Engineer has taken the following as the basis of cost, his estimate being made up on a schedule of quantities calculated

from the profiles of the line surveyed:-

\$6,67**7**,000 00

This, he states, will produce for the annual subsidy of the respective sections, as follows:—

1. St. Lawrence River to Lennoxville		
2. International Railway to Mattawamkeag	115,500	00
3. Harvey to Salisbury	63,400	00

Total per annum...... \$ 250,000 00

The Minister recommends that the apportionment of the subsidy suggested by the Chief Engineer and above set down, be adopted, and that it be paid out accordingly, as accruing under the contract.

The Committee submit the same for Your Excellency's approval.

JOHN J. MoGEE, Clerk Privy Council.

To the Honorable the Minister of Railways and Canals.

RETURN

(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 whomsover, 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.

CONTENTS.

- 1. Cap. 13, Statutes of Quebec, 1888, "An Act respecting the settlement of the Jasuits' Estates."
 - 2. Date of receipt thereof.
- 3. Despatch from the Lieutenant Governor of Quebec, 15th October, 1888, asking intention of the Dominion Government as to the allowance or disallowance of the said Act.
- 4. Copy of Order in Council, Privy Council, No 78, 19th January, 1889, with report of the Minister of Justice, leaving said Act to its operation.
- 5. Order in Council, No. 59, dated 24nd January, 1889, in reply to Petitions asking for the disallowance of the said Act.
 - 6. Petitions against the said Act becoming law:
 - 1. Montreal Presbytery of the Presbyterian Church.
 - 2. Evangelical Alliance.
 - 3. Miramichi Presbytery of the Presbyterian Church.
 - 4. Residents of Huntingdon, P. Q.
 - 5. Orange Society of Ottawa.

CAP. XIII.

An Act respecting the settlement of the Jesuits' Estates,

[Assented to 12th July, 1888.]

Preamble.

HEREAS at the opening of this session of the Legislature, it pleased His Honor the Lieutenant-Governor, in his gracious Speech from the Throne, to give expres-

sion to the following words:—

"I am happy to inform you that the question of the Jesuits' Estates, which has been so long pending between the religious and civil authorities, and which has caused so much uneasiness in this country, will soon be decided favorably, and to the satisfaction of all who are interested, and that my Government hopes, during this session, to submit a settlement in this connection for your approval.

"The obstacles which prevented the sale of the site of the old college of the Jesuits in this city have been removed; the principle of restitution in kind has been abandoned by the interested parties, and all that remains to be done is to determine the amount of the compensation

to be granted.

"On the occasion of the settlement of this delicate question certain Protestant educational institutions will receive a fair allowance, proportionate to the numerical importance

of the minority in this Province."

Whereas the said estates were confiscated by the Imperial authorities under the reign of George III, after the suppression of the Order of the Jesuits, and were afterwards transferred to the authorities of the former Province of Canada.

Whereas a large portion of the said estates was, at the time of and since Confederation, ceded to this Province.

Whereas energetic representations have been made to the civil authorities respecting these estates, by the religious authorities and the citizens of this country, and, especially, by His Lordship Jean François Hubert, Bishop of Quebec, on the 10th November, 1799; by the citizens of Quebec, on the 4th February, 1793; by their Lordships, the Bishops Joseph, Bishop of Quebec, Pierre Flavien Turgeon, Bishop of Sidyme, Coadjutor of Quebec, and Jean Jacques Lartigue, Bishop of Telmessa, suffragan of the Bishopric of Quebec, and Grand Vicar of the district of Montreal in or about the year 1835; by their Lordships, the Bishops Joseph, Archbishop of Quebec, Pierre Flavien Turgeon, Bishop of Sidyme, Coadjutor of Quebec, Pius, Bishop of Kingston, Patrick, Bishop of Carrha, Coadjutor of Kingston, Ignace, Bishop of Montreal, T. Charles, Bishop elect of Martyropolis,

Coadjutor of Montreal, Michael, Bishop of Toronto, in January, 1845; by the clergy of the dioceses of Quebec and Montreal, in June, 1847; by the Reverend Father Théophile Charaux, Superior General of the Mission of the Jesuits in Canada, in January, 1874; by their Lordships, the Bishops E. A., Archbishop of Quebec, L. F., Bishop of Three Rivers, Jean, Bishop of Rimouski, Edouard Charles, Bishop of Montreal, Antoine, Bishop of Sherbrooke, J. Thomas. Bishop of Ottawa, L. Z., Bishop of St. Hyacinthe, Dominique, Bishop of Chicoutimi, on the 9th October, 1878; and finally, by His Grace the Archbishop of Quebec, on the 2nd of January, 8th of April and 27th of April, 1885.

Whereas, in his letter of the 2nd of January, 1885, addressed to the Honorable John J. Ross, then Premier of this Province, His Grace the Archbishop of Quebec stated:

"I have the honor to inform you that, in virtue of an In- Letter from dult of the 13th of October, 1884, I am personally authorized Archbishop of Quebec to by the Holy See to treat with the Government of the Pro-Hon. J. J. vince of Quebec, and, for a reasonable compensation, to set-informing tle the question of the ownership of the property formerly him that he owned in this Province by the Jesuits when their order was authorized to treat with the Go-

Whereas, in answer to one of these representations of vernment re-His Grace the Archbishop of Quebec, dated on the 8th suits' Estates. April, 1885, the Honorable John J. Ross, then Premier, re-

plied as follows on the 25th of April of the same year:

"If His Honor the Lieutenant-Governor in Council de-Reply of cides to re-open and reconsider this question of the Jesuits' Ross, to Arch-Estates, I will not fail to notify Your Grace and the Re-bishop of verend Jesuit Fathers, so that, with your assistance and Quebec. theirs, he may, if expedient, be able to submit to the Legislature a measure which will settle this question in a satisfactory and definite manner."

Whereas, consequent upon these various representations and specially that of the 9th of October, 1878, signed by the Bishops of the Province, protesting against the Government putting up for sale the property of the old Jesuits' College at Quebec, such sale did not take place and the property was allowed to fall into a wretched condition.

Whereas, on the 17th of February, 1888, the Honorable Honoré Mercier, Premier of this Province, wrote the follow-

ing letter:

"Rome, 17th February, 1888.

"To His Eminence Cardinal Giovanni Simeoni,

"Prefect of the Sacred College of the Propaganda.

"May it please Your Eminence:

"A despatch from Your Eminence, dated on the 7th May Letter from last, 1887, informed His Eminence Cardinal Taschereau that cier to

Cardinal Si- the Holy Father reserved to himself the right of settling meonirespect; the greation of the Loyvits' Estates in Consider ing the sale of the question of the Jesuits' Estates in Canada.

the old Je-

"Among the property so-called Jesuits' Estates, there is suits' college, the property of the old college of the fathers situate opposite the Basilica, in the very centre of the capital of the Province of Quebec.

"My predecessors in the Government deemed it their duty, in 1876, I believe, to order the demolition of the college and the division of the property into building lots, in view of an immediate sale, which, however, did not take place, owing to certain representations from exalted personages at the time.

"To avoid further difficulties, as I suppose, my predecessors let the matter lie and allowed the property to be so neglected that it has become a grazing ground and a receptacle for filth, so much so that it is openly said in Quebec that

the matter has become a public scandal.

"Under these circumstances, I deem it my duty to ask Your Eminence if you see any serious objection to the Government's selling the property, pending a final settlement of the question of the Jesuits' Estates.

"The Government would look on the proceeds of the sale as a special deposit to be disposed of hereafter, in accordance with the agreements to be entered into between the parties

interested, with the sanction of the Holy See.

"As it will perhaps be necessary upon this matter to consult the Legislature of our Province, which is to be convened very shortly, I respectfully solicit an immediate reply

"Your Eminence will be pleased to accept the filial consideration with which I have the honor to subscribe my-

self.

"Your Eminence's devoted servant, " (Signed) Honoré Mercier, "Premier of the Province of Quebec."

To which letter the following reply was sent:

(Translation.)

Rome, 1st March, 1888.

" Illustrious Sir.

"I hasten to notify you that, having laid your request Cardinal Simeoni's reply before the Holy Father at the audience yesterday, His Holirespecting ness was pleased to grant permission to sell the property salé. which belonged to the Jesuit Fathers before they were suppressed, upon the express condition, however, that the sum to be received be deposited and left at the free disposal of the Holy See.

"In making this communication to you I wish you all good in the name of the Lord.

"Your Lordship's very affectionate, "(Signed) GIOVANNI CARDINAL SIMEONI, "Prefect, &c."

Whereas, on the 21st March, 1888, the following telegram Preamble. was sent from Quebec to His Eminence Cardinal Simeoni at Rome:

"In the matter of the Jesuits' Estates, the Government Telegram respectfully objects to the condition imposed in the letter from Mr. Merof Your Eminence of the first of March instant, and cannot nal Simeoni expect to succeed in the settlement of this delicate question objecting to conditions unless permission is given to sell the property upon the conditions and in accordance with the exact terms of my letter of the seventeenth of February last.

"I respectfully solicit an immediate favorable answer in the interests of the final settlement of the question.

> " (Signed) HONORÉ MERCIER, "Premier."

Whereas, on the 24th of March, 1888, the following answer was sent from Rome by His Eminence Cardinal Simeoni:

"The Pope allows the Government to retain the pro- Cardinal Siceeds of the sale of the Jesuit Estates as a special deposit meoni's reply? to be disposed of hereafter with the sanction of the Holy See."

Whereas, consequent upon these negotiations, the follow- Preamble ing correspondence was exchanged between the Premier and the Very Reverend Father Turgeon, rector of St. Mary's College, Montreal, and agent for the Holy See:

"St. Mary's College, 25th April, 1888.

"Honorable Honoré Mercier.

"Premier of the Province of Quebec.

"Sir,

"I have the honor to forward you a copy of the official Letter from letter, dated Rome, the 27th March, 1888, by which the Rev. A. D. Sacred College authorizes the Jesuit Fathers to treat with Mr. Mercier the Government, in the matter of the 'Jesuits' Estates.'

"I have also the honor to inform you that at a marking of Mr. Tur-

"I have also the honor to inform you that, at a meeting geon's apof the corporation of the 'Society of Jesus,' on the 2nd attorney to April, 1888, I was appointed general and special attorney settle the for that purpose.

Jesuit's estate's ques-

"Further, that, on the 9th of April last, the Reverend Father Superior of the Mission in Canada gave me his power of attorney by deed made and passed in the city of Montreal, district of Montreal, in the office of Mtre. L. O. Hétu, Notary Public, with full power to treat with the Government upon the conditions expressed in the letter of the Sacred College.

"I have the honor to be, "Your very obedient servant, "(Signed) A. D. Turgeon, S. J., "Procurator of the Jesuits at Montreal."

(Translation.)

"Rome, 27th March, 1888.

" Very Reverend Father,

Letter from Cardinal Simeoni to Rev. giving him authority to effect settlement.

"I have pleasure in notifying you that the question respecting the revendication of the property of the Jesuit A. D. Turgeon Fathers in Lower Canada, having been referred to a special commission of Cardinals on the 20th of March instant, the following proposition was submitted for solution:

"Should authority be given to any one to claim from the Government of the Province of Quebec the property which belonged to the Jesuit Fathers before the suppression of the society, and to whom and how should it be given."

"Their Eminences the Cardinals replied as follows:

"Affirmatively in favor of the Fathers of the Society of Jesus and in accordance with the method prescribed in other places, that is to say, that the Fathers of the Society of Jesus treat in their own name with the civil government, in such a manner, however, as to leave full liberty to the Holy See to dispose of the property as it deems advisable, and, consequently, that they should be very careful that no condition or clause should be inserted in the official deed of the concession of such property which could in any manner affect the liberty of the Holy See.

"Further, whatever be the sum which the Jesuit Fathers receive from the Government, that they should be obliged to deposit it in a place of safety to be determined by the

Sacred College.

"The foregoing resolution was referred to the Holy Father at to-day's audience and His Holiness was pleased to approve of it in its entirety;

You are consequently authorized to revendicate the said

property upon the conditions above set forth.

"Whilst making you this communication, I pray the Lord to preserve and prosper you

" Reverend Father,

"Yours, &c., "(Signed) JEAN CARD. SIMEONI, Prefect.

"(Signed) D. Arch. DE Tyre, Secy. "The Very Reverend Father

" Procurator of the Jesuits, " Montreal."

> "PREMIER'S OFFICE, "Province of Quebec, "Quebec, 1st May, 1888.

"Reverend Father TURGEON,

"Procurator of the Jesuits at Montreal,

" Montreal.

"Very Reverend Father.

"I submitted to my colleagues the copy of the letter of Letter from the Sacred College of the Propaganda, dated Rome, 27th Mr. Mercier to Moreh lest which outhorizes the Leguit Fathers to treat the Rev. Mr. Tur-March last, which authorizes the Jesuit Fathers to treat geon fixing in their own name with the Government of the Province bases of respecting the property known as the 'Jesuits' Estates.' I also submitted to them your letter of the 20th of April last, by which you forwarded to me that of the Propaganda, and in which you inform me that you have been appointed general and special attorney for the above purposes, and that the Reverend Father Superior of the Mission in Canada gave you power of attorney before Mtre. Hétu, Notary, with full power, &c., &c.

"Before entering into negotiations with you respecting these estates, the Government desires you to bear in

mind:

"1 That you must deposit with a notary the original of the aforesaid letter from the Sacred College, with two solemn declarations made according to law, and identifying the signatures of the Prefect and Secretary of the said College, which are at the end of the said document;

"2. That authentic copies of the said letter and solemn declarations, as well as of the resolution of your corporation passed on the second of April last, and of the power of attorney from the Reverend Father Superior of the Mis-

sions in Canada, be forwarded to us;

"3. That in consenting to treat with you respecting this property, the Government does not recognize any civil obligation, but merely a moral obligation, in this respect;

"4. That there cannot be a question of a restitution in kind; as this has been abandoned by those concerned, but only a compensation in money to be agreed upon amicably with you;

"5. That the amount fixed as compensation shall be ex-

clusively expended in the Province;

"6. That you will grant to the Government of the Province of Quebec a full, complete and perpetual concession of all the property which may have belonged in Canada, under whatever title, to the Fathers of the old Society, and that you will renounce to all rights generally whatsoever upon such property and the revenues therefrom in favor of our Province, the whole, as well in the name of the old Order of Jesuits, and of your present corporation. as in the name of the Pope, of the Sacred College of the Propaganda and of the Roman Catholic Church in general;

"7. That any agreement made between you and the Government of the Province will be binding only in so far as it shall be ratified by the Pope and the Legislature of this

Province;

"8. That the amount of the compensation fixed shall remain in the possession of the Government of the Province as a special deposit until the Pope has ratified the said settlement and made known his wishes respecting the dis-

tribution of such amount in this country;

"That your corporation will receive the interest upon such deposit at four per cent. from the date of the signification to the Provincial Secretary of the acte of the Pope confirming the said arrangement, up to the payment of the capital, which is to be made to the persons entitled thereto within six months after the signification to the said Provincial Secretary of the decision of the Pope respecting such distribution;

"9. Finally, that the statute ratifying such agreement shall contain a clause enacting that when such settlement is arrived at, the Protestant minority will receive a grant in proportion to its population in favor of its educational

work.

"These, Reverend Father, are the bases upon which the Government wishes to treat with you the delicate question

of the property called the 'Jesuits' Estates.'

"Hoping that you will second our wishes to settle the matter as soon as possible, for the advantage of all persons interested.

" I have the honor to remain,

"Your very devoted servant,

" (Signed) Honoré Mercier.

" Premier."

" Quebec, 8th May, 1888.

" Honorable Honoré Mercier. "Premier. Province of Quebec.

"Sir.

"I have the honor to acknowledge receipt of your letter Letter from of the 1st May last, in which you state that you had Rev. A. D. submitted to your colleagues the Indult of the Sacred Mr. Mercier, College of the Propaganda, dated Rome, the 27th March bases of last, authorizing the Fathers of the Society of Jesus to settlement. treat, in their own name, with the Government of the Province of Quebec, the question of the property known as the 'Jesuits' Estates'

"You also state that you had submitted to your Honorable colleagues my letter of the 25th April last, by which I inform you that I was appointed general and special attorney for the aforesaid purposes, and that the Reverend Father Superior of the Mission in Canada, gave me a power of attorney before Mtre. Hétu, notary, with power, &c., &c.

"Hease accept my thanks, Sir, for the very prompt attention which you were pleased to give to my communi-

cation.

"I have now the honor to reply to the different points which your Government wishes me to bear in mind. following the order of the numbers in yours of the 1st May,

"1. The original of the aforesaid letter of the Sacred College, with solemn declarations made according to law, identifying the signatures of the Prefect and Secretary of the said College, which are at the end of the said document, have been deposited in the office of Mtre. Cyrille

Tessier, notary, residing in the city of Quebec.

"2. Enclosed please find authentic copies of that letter and of the two solemn declarations, as well as of the resolution of our Corporation passed on the 2nd of April last, and of the power of attorney of the Reverend Father Superior of the Mission in Canada, the original whereof under the number eleven thousand eight hundred and fifty-four, remains in the office of Mtre. L. O. Hétu, notary, residing in the city of Montreal.

"3 The moral obligation which the Government recognizes in consenting to treat with me is a sufficient guaran-

tee to permit of my entering upon the negotiation.

"4. The Holy See, the superiors of the Society of Jesus and the corporation which I represent, whilst praising vour desire to render justice to the Fathers of the Society of Jesus, also wish to assist the Government in settling this question and to give a proof of their devotion to this country and to the Province of Quebec in particular; they will consequently be satisfied with a fair compensation, regard being had to the value of the property heretofore in the possession of the Jesuit Fathers, in place of a restitution in kind.

"Such compensation in money will be fixed amicably, as I have reason to hope from the great kindness that you have so far shown me, and the generous assistance which will be given to us by your Honorable colleagues, and the Honorable members of both Houses.

"If, however, it should be necessary to resort to arbitra-

tion, none of the parties interested can object thereto.

"5. Relying upon the constitutions of the Society of Jesus, and upon the intentions of the former donors, I can affirm that the sum fixed as compensation and which will be received by the Jesuit Fathers, will be exclusively

expended in the Province.

"6. The Government of the Province of Quebec will receive a full, complete and perpetual concession of all the property which may have belonged in Canada, by whatever title, to the Fathers of the old Society, and the Jesuit Fathers will renounce to all rights generally whatsoever upon such property and the revenues therefrom in favor of the Province, the whole, in the name of the Pope, of the Sacred College of the Propaganda and of the Roman Catholic Church in general.

"7. Any agreement made between the Government of this Province and the Jesuit Fathers will be binding only in so far as it shall have been ratified by the Pope and the

Legislature of this Province.

"8. The amount of the compensation fixed shall remain in the possession of the Government of the Province as a special deposit, until the Pope has ratified the said settlement, and made known his wishes respecting the distribu-

tion of such amount in this country.

"Our corporation will receive the interest upon such deposit at four per cent. from the date of the signification to the Provincial Secretary of the acte of the Pope confirming the said arrangement, up to the payment of the capital which is to be made to the persons entitled thereto within six months after the signification to the said Provincial Secretary of the decision of the Pope respecting such distribution.

"9. As this clause does not touch the question which I am entrusted to treat with the Government, I wish you

would dispense with my replying thereto.

"It only now remains for me, to again express my gratitude, and to promise you my assistance in aiding you to settle as promptly as possible this delicate question.

"I have the honor to be,

"Your very humble servant,

"(Signed) A. D. TURGEON, S. J.,
"Procurator of the Jesuits."

PREMIER'S OFFICE, Quebec, 14th May, 1888.

" Reverend Father,

"In reply to your letter of the 8th instant, I have the Letter from honor to inform you that the Government is prepared to Mr. Mercier receive your claim in writing as to the compensation to be Rev. Mr. Turallowed.

geon to pro-duce claim for-

"It hopes that it will be very reasonable and moderate, compensain view of the financial and other difficulties of the Province.

> "Your obedient servant, " (Signed) Honoré Mercier.

"Very Reverend Father Turgeon, S. J."

" QUEBEC, 20th May, 1888.

"The Honorable HONORE MERCIER, " Premier, Province of Quebec.

" Sir.

"I have the honor to acknowledge receipt of your letter Letter from of the 14th instant, in which you inform me that the Gov-Rev. A. D. Turgeon to ernment is prepared to receive my claim for a reasonable Mr. Mercier and moderate compensation.

"This, Sir, is what I think I should reply in support of compensa-

the cause which I have the honor to defend:

claiming cer-

"According to the official reports which you were kind enough to communicate to me, I find that the 'Jesuits' Estates' are valued at the sum of \$1,200,000.00.

"This is only approximate, and I think it is greatly less

than the real value.

"Competent men whom I have consulted at Quebec, Montreal and Three Rivers do not hesitate to state that the Jesuits' Estates are worth at least \$2,000,000.00.

"They calculate:

"1. The seigniories and fiefs at...... \$ 5,000 00 " 2. The property in the centre of the city of Montreal, a superficies of 330,003 feet. may be valued at \$3 a foot, as the authorized valuators assert even that the real price is \$6 a foot, as it is \$10 at the Place d'Armes and \$16 at Victoria Square, representing, for half the real value, a sum of..... 990,009 00

"3. At Quebec, the property of the old college is valued in the official reports at a price varying from \$50,000 to \$200,000, say

100,000 **00** "4. The revenues since 1867 reach the sum of 400,000 00

" 5. The capital of the lods et ventes is...... 92,572 **0**0 "6. A property at N.D. des Anges was sold for 18,200 00

"Which gives a total of over two million dollars.

- "You will notice, Sir, that nothing is said of interest even since Confederation.
- "It is, therefore, in view of these documents that I am called upon to make a claim for a reasonable and moderate compensation before putting the Government in full enjoyment and lawful possession of all the Jesuits' Estates in Canada.
 - "Now, my reasonable and moderate proposition is this:
- "I ask from the Government of the Province of Quebec one-half of the actual value of only one of the properties which our Fathers bought with their own money, of our property in Montreal, that is to say, \$990,009.00, and the Jesuit Fathers will abandon all the other properties. (See list of the Jesuits' Estates.)
 - "I base my moderate claim upon the following reasons:
- "1. I ask only one-half of a single property and I concede twenty others (see list of the estates); is not that reasonable and moderate?
- "2. Our present debts amount to \$200,000.00; for our three establishments for study and training we require not less than \$30,000,00 of annual revenue; to make the urgent repairs which are required at our establishments of Quebec, Three Rivers, Montreal, Sault au Recollet and Lake Nominingue, it would require not less than \$200,000, so that my demand is reasonable and moderate.
- "3. Will the Government find my demand exaggerated when it considers that the sale of one property alone would reimburse it and be more than enough?
- "For instance, the Champ de Mars, at \$5 a foot, would bring \$1,024,110.00; would not a similar result be obtained with the seigniory of Cap la Magdeleine, which is forty leagues in superficies?

"That is the reason why I consider my demand reasonable and moderate.

"I am not unaware that, in a document presented at Rome some years ago, the whole of the Jesuits' Estates were valued at \$400,000.00; but the incorrectness of that valuation is shown even in the official reports above cited.

"The same document contains other statements none the less incorrect to prove that the Society of Jesus would be unable of itself to recover the property owing to the opposition which it would meet with in the Legislature.

"In protesting against this insinuation, I am happy to affirm that since the Society of Jesus entered into negotiations with the Government it has met with the utmost kindness from you, and your Honorable colleagues and the Honorable members of both Houses

"In conclusion may I suggest:

"As soon as the settlement is arrived at, would it not be possible, beyond the compensation allowed, to give to the

Jesuit Fathers a lot of land which would be a monument to commemorate the eminently Catholic and conservative act which you are about to perform.

"I would suggest the Common of Laprairie; this property, in its present condition, is of little value, but it would

suffice for the commemorative purpose indicated.

"It is also one way of commemorating, in the political history of the country, that glorious concordat, the effecting whereof would be associated with the name of your Government, as soon as the Holy Father has ratified it; that is, that the establishments of the Jesuit Fathers in this Province are always allowed, in accordance with their deserts and if they ask for it, to participate in the grants which the Government of this Province allows to others institutions to encourage teaching, education, industries, arts and colonization.

"The reason of this favor is that these grants would be made in great part out of the funds of the 'Jesuits' Estates.'

"Would it not be strange, to say nothing further, to refuse the Jesuits a share, granted to others, out of the pecuniary benefits derived from the revenues of these same Estates with which the Jesuits enriched the Province.

"Here then, Sir, is what I think it necessary to say to you before knowing what the Government is ready to offer as

compensation for the 'Jesuits' Estates.'

"Awaiting the honor of a reply I depend upon the justice of my claim and upon the liberality of a wise Government.

> "I have the honor to be, "Sir, "Your humble servant, A. D. TURGEON, S. J. " (Signed) "Procurator of the Jesuit Fathers."

> > "PREMIER'S OFFICE, " Province of Quebec, "Quebec, 4th June, 1888.

"Very Reverend Father,

"I have the honor to acknowledge receipt of your letter Letter from Mr. Mercier to Rev. A. D.

dated the 20th May last.

"You acquaint me with the conditions upon which you Turgeon! are prepared to settle the question of the 'Jesuits' Estates, declining to by means of a compensation equal to one-half of the value claimed and of one of the properties of the Jesuits bought with their making counter of the properties of the Jesuits bought with their teroffer.

"I submitted your letter to my colleagues, assembled in Council, and we came to the conclusion to answer you, as

follows:

"1. Seeing the difficulties surrounding the settlement of this question and the situation of the Province, we are obliged with regret to say that we can not offer you more than \$400,000.

"2. To arrive at this figure we do not take as a basis the intrinsic value of the property, as the religious authorities long ago abandoned the claim for a restitution in kind, and

invariably limited their claim to a compensation.

"The amount of this compensation was even indicated by the religious authorities of this country, at Rome, which authorities on several occasions declared themselves willing to accept \$400,000.

"3. It is therefore impossible for us to exceed that sum.

"We are ready to offer it to you upon the conditions contained in my letter of the 1st May last.

"4. Further, in commemoration of the settlement, we will retrocede to you the rights which the Government possesses

in the Common of Laprairie.

"Such rights, small it is true, are, however, the same which the Jesuit Fathers reserved for themselves by the deed of concession to the inhabitants of Laprairie de la Madeleine, passed on the 19th May, 1694, before Mtre. Adhémar, royal notary of the Island of Montreal, less the few changes in such rights made by Acts of the Legislature.

"These are the offers which my colleagues charged me

to make to you.

"Hoping that, under the circumstances above set forth, you may accept them.

"I have the honor to be
"Your very devoted,
"(Signed) HONORÉ MERCIER.

"Very Reverend Father Turgeon,
"Agent of the Holy See,
"Quebec, P.Q."

"Quebec, 8th June, 1888.

The Honorable Honoré Mercier, "Premier, "Province of Quebec.

"Sir,

Acceptance by Rev. A. D. "In view of your letter of the 4th of June instant, deturgeon of claring that it is impossible for the Government to offer more than \$400,000.00, and for the reasons given by you and the difficulties you allege, I think I am fulfilling the mandate entrusted to me and carrying out the wishes of the Holy See and of the Superior of the Company of Jesus,

who have at heart the removal of the uneasiness caused by

acknowledging receipt of

this question in the country, by accepting your offers, small as they are, and by hoping that the Holy See will agree to them and be pleased to ratify them.

"I have the honor to be,

"Your very humble servant, "(Signed) A. D. TURGEON, S. J., "Procurator of the Jesuits."

> "PREMIER'S OFFICE, "Province of Quebec, "Quebec, 8th June, 1888.

"Very Reverend Father,

"I have the honor to acknowledge receipt of yours of Letter from this day, in which you inform me that in your official ca- Mr. Mercier to Rev. A. D. pacity you accept the offers made by the Government to Turgeon vou in my letter of the 4th of June instant.

"There only remains for me to prepare the necessary acceptance of

documents and to submit them to the proper persons.

"Believe me, Very Reverend Father. "Your very devoted,

"(Signed)

Honoré Mercier, "Premier.

"The Very Reverend Father Turgeon, "Procurator of the Jesuits,

"Quebec, P. Q."

"Whereas copies of the said letters of the Reverend Father Turgeon, dated the 25th April, 1888, and of the Premier of the 1st May, 1888, have been communicated to His Eminence Cardinal Taschereau, as appears by the following correspondence:

> "Premier's Office, "Province of Quebec, "Quebec, 3rd May, 1888.

"To His Eminence Cardinal Taschereau, Quebec.

"May it please Your Eminence:

"I have the honor to forward you herewith, for the in- Letter from formation of Your Eminence, copies of the following docu- Mr. Mercier to Cardinal

"1. A letter of the Prefect and Secretary of the Sacred forwarding him certain Congregation of the Propaganda, dated Rome, 27th March, documents 1888, authorizing the Procurator of the Jesuits, at Montreal, respecting to treat with the Government of this Province, on the question of the Jesuits' Estates. (Italian version.)

"2. French version of the same letter, the translation having been made by the Reverend Jesuit Fathers:

"3. A letter of the Reverend Father Turgeon, enclosing

the said letter from the Propaganda;

"4. The reply of the Government to the Reverend Father.
"I remain

"Your Eminence's

" Most obedient servant,

"(Signed)

Honoré Mercier.

"Premier."

His Eminence was pleased to reply to the said communication as follows on the 4th May, 1888:

"Sir.

Letter from Cardinal Taschereau to Mr. Mercier acknowledging receipt.

"I have the honor to acknowledge the receipt of your letter of vesterday, with the documents which accompany it, respecting the matter of the Jesuits' Estates.

"Please accept my thanks.

"Your obedient servant,

E. A. CARDINAL TASCHEREAU, "Archbishop of Quebec."

Whereas the documents transmitted by the very Reverend Father Turgeon, with his aforesaid letter of the 8th May.

1888, are in the following words:

Extract from society of Jesus appointing Rev. A. D. Turgeon as gene-ral and special attorney to treat with Government respecting Jesuits'

Estates.

"Extract from the minutes of the corporation of the corporation of Society of Jesus at a meeting of the members of the said congregation, held on the second of April, eighteen hundred and eighty-eight, at the house of the Immaculate Conception in Montreal, Rachel street.

(Translation.)

"Father Adrien Turgeon is appointed general and special attorney of the Reverend Father Superior for the purpose of treating with the Government of the Provinceof Quebec, respecting the question of the estates of the late order of Jesuits in Canada (Jesuits' Estates), or any other question."

> F. Vignon, S. J. " (Signed)

Secret."

"Before Léonard Ovide Hétu, notary public, duly admit-Delegation of powers Rev. ted in and for the Province of Quebec, one of the Provinces Pierre Hamel to Rev. A. D. of the Dominion of Canada, residing in the city of Montreal, in the district of Montreal, in the said Province of Quebec, Turgeon. undersigned, appeared:

"Reverend Father Pierre Hamel, Superior of the Society of Jesus in Canada, residing in the city of Montreal, in the district of Montreal, who, by these presents constitutes and appoints as his general and special attorney, the Reverend Father Adrien D. Turgeon, Rector of St. Mary's College, of the city and district of Montreal, to whom he gives and delegates all rights and powers which he possesses or may possess hereafter, either in his personal capacity or as Superior of the Society of Jesus, or as delegate, attorney or chargé d'affaires of the Reverend Father General of the Society of Jesus, or as delegate, attorney or chargé d'affaires of the Holy See, with reference to the property of the Jesuits now held by the Government of the Province of Quebec, and to any matter directly or indirectly connected with the question of the former estates of the Jesuits in Canada, and with reference to all transactions of any kind whatsoever, which might be effected from and after this date with the Government or Legislature of the Province of Quebec, or with any minister or member of the federal or provincial Governments in Canada, and also with reference to any petition, bill or measure which might be submitted of the parliaments or legislatures of Canada by the Society of Jesus or by any establishment of the Order of Jesuits, or submitted to the said parliaments or legislatures by other persons, but affecting directly or indirectly in any manner the rights or interests of the Society of Jesus or of any of its establishments, especially the power of asking and receiving from all persons to whom it may appertain, the movable and immovable property and movable and immovable claims belonging to the Society of Jesus or of which the party appearing, in any of his aforesaid qualities, shall have the control, direction, administration or disposal, by any title whatsoever, the power to sell, abandon, exchange, transfer or lease the said property to such person by such means and for such prices, charges, clauses, conditions and considerations, as the constituted attorney shall deem advantageous or acceptable, to bind himself to all guarantees, to receive the price of the said property and give a discharge therefor, to accept any indemnity and consent to any arrangement or compromise of any kind whatsoever, to receive the said indemnity or compensation and to give a good and valid acquittance therefor, to name and appoint all advocates, counsel, arbitrators, umpires and experts, etc., to substitute one or more persons in the whole or in a portion of the present powers, to revoke the same and substitute others therefor, and sign all deeds to the above effect and generally to do, in the most ample manner, everything which the appearing party might himself do, although not herein provided, ratifying and promising to ratify the same at once upon being so requested, these presents to remain valid until expressly revoked, notwithstanding their ex-

piration or lapse of time.

"Thus done and passed in the city of Montreal, in the district of Montreal, in the office of the said undersigned notary, in the year one thousand eight hundred and eightyeight, on the ninth day of the month of April, in the afternoon, under the number eleven thousand eight hundred and fifty-four.

"And the party appearing has signed with me the said

notary."

" (Signed) P. HAMEL, S. J., "(Signed) L. O. HÉTU, N. P.

"True copy of the original remaining of record in my office.

" (Signed)

L. O. HÉTU, N. P."

Deed of depo-

"In the year one thousand eight hundred and eightysit of original eight, on the fifth of May, before the undersigned Notary dinal Simeoni. Public for the Province of Quebec, Canada, residing in the

city of Quebec, appeared:

"The Very Reverend Father Adrien D. Turgeon, of the city of Montreal, member of the Society of Jesus, rector of St. Mary's College, at Montreal, in his quality of representative or attorney, in accordance with the deed of delegation of powers of the 9th of April last (1888), before L. O. Hétu, notary, at Montreal, of the Very Reverend Father Pierre Hamel, of the city of Montreal, Superior of the Society of Jesus in Canada, in the different capacities detailed in the said act, who hereby deposits with Cyrille Tessier, the undersigned notary, and requires him to place the same among his minutes, dated this day, the original of a letter (or Indult) in Italian and Latin, addressed to the Very Reverend Father, the Procurator of the Jesuits of Montreal. by His Eminence Jean Cardinal Simeoni, Prefect of the College of the Propaganda, dated at Rome, on the 27th day of March last; which letter, to which is affixed the signature of His Lordship the Archbishop of Tyre, Secretary of the said College, is annexed to the minute hereof, after having been by the appearing party, duly certified and signed in presence of the said notary.

"To the minute of this deed are also annexed two solemn declarations verifying and identifying the signatures affixed to the end of the said letter; one of Monsignor Henri Têtu, of Quebec, priest, Private Chamberlain of His Holiness Leo XIII, Almoner of the Archbishop of Quebec, and the other of Monsignor Cyrille Alfred Marois, priest, Private Chamberlain of His Holiness Leo XIII, Secretary of the Archdiocese of Quebec, residing at Quebec, which declarations are dated this day and were received before Cy. Tessier, the undersigned notary, at Quebec, under the number seven

thousand four hundred and seventy-nine of the minutes of Cy. Tessier, the undersigned notary.

"In faith and testimony whereof, the party appearing has signed with the said notary, the same having been duly read.

> " (Signed) A. D. Turgeon, S. J., " (Signed) Cy. Tessier, N. P.

"True copy of the original remaining of record in my office.

> " (Signed) Cy. Tessier, N. P."

"S. Congregazione di propaganda

"Segretaria " No. 1590.

" Oggetto.

" Roma li 27 Marzo, 1888.

Original letter from Cardinal Simeoni to the Procurator of the Jesuits.

" RMO PADRE,

"Ho il piacere di significare alla P. V. che deferita la questione concernente il riacquisto dei beni dei Padri Gesuiti nel basso Canada ad una speciale commissione Cardinalizia nel giorno 23 corr. Marzo fu ad essa proposto a risolvere il dubbio seguente: "Se, come, ed a chi convenga dare l'autorizzazione di reclamare dal Governo della Provincia di Quebec i beni appartenuti ai PP1 . Gesuiti prima della soppressione della compagnia." Ora gli Emi Cardinali risposero: "Affirmative, favore PP. Societatis Jesu, et iuxta modum alias praescriptum, scilicet PP. Societatis Jesu suo nomine cum civili Gubernio agant, ita tamen ut Sedi aplicae plena libertas maneat de iis bonis disponendi, prout opportunum iudicaverit, et ideo curandum illis omni studio est, ut nulla conditio vel clausula in publico instrumento cessionis bonorum apponatur, quibus S. Sedis libertas quocumque modo afficiatur. Insuper quamcumque summan PP. Societatis Jesu percepturi erunt a Gubernio, deponere teneantur in loco tuto a S. Congne determinando."

"Riferta la suda. risoluzione nell'Udienza del giorno stesso 20. Marzo al S. Padre' Sua Santità si degnò approvarla in tutte le sue parti. Quindi è che la P. V. è autorizzata a revendicare i beni stessi con le condizioni già

esposte.

"In questa intelligenza prego il Signore, che La conservi. e La prosperi.

" Di V. P. " Affmo

"GIOVANNI CARD. SIMEONI Prefetto.

"Revmo

"Pe Procuratore dei Jesuiti di " Montreal.

"D, ARCIV. DI TYR Segret,

"This is the original letter mentioned in a certain deed of deposit made by me this day before Cy. Tessier, notary, at Quebec, which letter I certify to be true.

"Quebec, 5th May, 1888.

" (Signed) A. D. TURGEON, S. J.

"In presence of

"(Signed) CY. TESSIER, N. P.

"A true copy,

" (Signed) Cy. Tessier, N. P."

Declaration of Rev. H. Têtu as to signatures to letter.

"I, Henri Têtu, Priest, Private Chamberlain of His Holiness Leo XIII, Chaplain of the Archbishop's Palace, Quebec. residing in the city of Quebec, solemnly declare that the signatures, "Giovanni Card. Simeoni Prefetto" and "D. Arciv. di Tyr Segret, at the foot of the letter—or indult in the Italian and Latin languages, addressed to the Reverend Father Procurator of the Jesuits of Montreal, dated at Rome on the twenty-seventh March last (1888) and bearing the number 1590 are, severally, the signatures of Cardinal Simeoni, Prefect, and of his Lordship the Archbishop of Tyre, Secretary of the College of the Propaganda.

"And I make this solemn declaration, conscientiously believing the same to be true and by virtue of the Act passed in the thirty-seventh year of Her Majesty's reign, intituled: 'An Act for the suppression of voluntary and

extra-judicial oaths.'

" (Signed) H. Tétu, Priest, C. S.

"Declared before me, notary, at Quebec, this fifth day of May, 1888. Cy. Tessier, N. P."

"This is one of the solemn declarations of which mention is made in a certain deed of deposit made by me this day, before Cy. Tessier, notary, at Quebec, to the original

of which deed it has remained annexed.

"Quebec, 3rd May, 1888.

"(Signed) A. D. TURGEON, S. J.

"In presence of

" (Signed)

"(Signed) Cy. Tessier, N. P.

"A true copy, oned) Cy. Tessier, N. P." " (Signed)

Declaration of Rev. C. A. Marois as to signatures to letter.

"I, Cyrille Alfred Marois, Priest, Private Chamberlain of His Holiness Leo XIII, Secretary of the Archdiocese of Quebec, residing in the city of Quebec, solemnly declare that the signatures: "Giovanni Card. Simeoni Prefetto" and "D. Arciv. di Tyr Segret," at the foot of the letter or indult in the Italian and Latin languages addressed to the

Reverend Father Procurator of the Jesuits of Montreal. dated at Rome, the twenty-seventh March last (1888), and bearing the number 1590, are, severally, the signatures of Cardinal Simeoni, Prefect, and of His Lordship the Archbishop of Tyre, Secretary of the College of the Propaganda.

"And I make this solemn declaration conscientiously believing the same to be true and by virtue of the Act passed in the thirty-seventh year of Her Majesty's reign, intituled: 'An Act for the suppression of voluntary and extra-judicial oaths.'

"(Signed) C. A. MAROIS, Priest, C. S.

"Declared before me, notary, at Quebec, this fifth of May, 1888.

"(Signed) Cy. Tessier, NP"

"This is one of the solemn declarations mentioned in a certain deed of deposit made by me, this day, before Cy. Tessier, notary, at Quebec, to the original of which deed it has remained annexed.

"Quebec, 5th May, 1888. " (Signed) A. D. TURGEON, S. J. "In presence of " (Signed) CY. TESSIER, N. P. "A true copy, Signed) Cy. Tessier, N. P." " (Signed)

Whereas it is expedient to put an end to the uneasiness Preamble, which exists in this Province, in connection with the question of the Jesuits' Estates, by settling it in a definite manner: Therefore, Her Majesty, by and with advice and consent of the Legislature of Quebec, enacts as follows:-

1. The aforesaid arrangements, entered into between the Certain Premier and the Very Reverend Father Turgeon, are hereby ratified and ratified, and the Lieutenant-Governor in Council is autho- may be carrized to carry them out according to their form and tenor.

2. The Lieutenant-Governor in Council is authorized to Certain sum pay, out of any public money at his disposal, the sum of may be paid out for purfour hundred thousand dollars, in the manner and under pose of such the conditions mentioned in the documents above cited, and settlement. to make any deed that he may deem necessary for the full and entire execution of such agreement.

3. The Lieutenant-Governor in Council is authorized to Government transfer to the Society of Jesus, a society incorporated under rights to Lathe Act of this Province, 50 Victoria, chapter 28, all the mon may be rights of this Province in and to Laprairie Common.

transferred to Society of Jesus.

On settlement being effected Council of Public Instruction. such sum and application of interest thereof.

4. On such settlement being effected, the Lieutenantcertain sum to Governor in Council may pay, out of any public money at be paid over his disposal, a sum of sixty thousand dollars to the Protes-Committee of tant Committee of the Council of Public Instruction to be invested by the said Committee.

The interest from said investment shall be annually ap-Investment of portioned by the Protestant Committee, with the approval of the Lieutenant-Governor in Council, among the Protestant institutions of superior education, in addition to and in the same manner as any sums now granted by law for the purpose of Protestant superior education in this Province.

Powers of Lieutenant-Governor in carrying out such agreements.

5. The Lieutenant-Governor in Council is authorized to enforce wherever necessary all claims that may become due to the Government of the Province owing to the execution of the aforesaid agreements.

Property known as tates" may be disposed of by Licutenin Council.

6. The Lieutenant-Governor in Council is hereby autho-"Jesnits' Es- rized to dispose, in the manner he deems most advantageous to the Province, of the whole of the property, movable and immovable, interests and rights, generally whatsoever of ant Governor the Province upon the said property known as the Jesuits' Estates.

48 V., c. 10, to apply.

Application of proceeds arising from disposal of such property.

7. The Act of the Legislature 48 Victoria, chapter 10, notwithstanding section 5 of the said Act, and notwithstanding any other Act to the contrary, shall apply to the said estates, the proceeds whereof may be applied also, notwithstanding any Act to the contrary, for the above mentioned purposes, or for any other purposes approved by the Legislature.

SECRETARY OF STATE, CANADA, OTTAWA, 14th March, 1889.

The Act of the Legislature of the Province of Quebec of the session of 1888, chap. 13, known as "The Jesuits' Estates Act," was received in this Department, together with the other Acts of the same session, on the 8th August, 1888.

G. POWELL, Under Secretary of State.

G. IOWELL, Order Secretary of State.

GOVERNMENT HOUSE, QUEBEC, 15th October, 1888.

SIR,—Among the Acts of the last session of the Legislature of this Province, of which copies were transmitted to you the 8th of August last, according to law, is found the one intituled "An Act relating to the question of the settlement of the Jesuits' Estates," Chapter 13, of 51-52 Victoria.

My Government for urgent reasons desire to know without delay, the intention of the advisers of His Excellency the Governor General, as to the exercise of the right of disallowance with reference to this Act. Under these circumstances, I

request you to inform me of their intention as soon as possible.

I have the honor to be, Sir, your obedient servant, A R. ANGERS, Lieutenant Governor.

The Honorable the Secretary of State, Ottawa.

DEPARTMENT OF THE SECRETARY OF STATE, CANADA, OTTAWA, 15th October, 1888.

Sir,—I have the honor to acknowledge the receipt of your despatch of yesterday, conveying the information to the Federal Government, that Your Government for urgent reasons desire to know, without delay, the intention of the advisers of His Excellency the Governor General as to the exercise of the right of disallowance, with reterence to the Act concerning the settlement of the question of the Jesuits' listates, Chapter 13, of 51-52 Victoria, and to inform you that this request will be considered without delay.

I have the honor to be, Sir, your obedient servant, P. PELLETIER, Under Secretary of State.

His Honor, the Lieut. Governor of the Province of Quebec, Quebec.

REPORT of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council on the 19th January, 1889.

The Committee of the Privy Council have had under consideration the annexed report dated 16th January, 1889, from the Minister of Justice, upon the Acts of the Legislature of the Province of Quebec, passed in the Session of 1888, recommending that the said Acts (a schedule of the titles of which is hereto annexed) be left to their operation.

The Committee concur in the above recommendation and advise that the Secretary of State be authorized to transmit a copy of this Minute, if approved, to the

Lieutenant Governor of Quebec for the information of his Government.

JOHN J. McGEE, Clerk, Privy Council.

DEPARTMENT OF JUSTICE, CANADA, OTTAWA, 16th January, 1889.

To His Excellency the Governor General in Council:

The undersigned having had under consideration the Acts of the Legislature of the Province of Quebec passed in the Session held in the year 1888, the titles of which Acts are mentioned in the Schedule hereto, respectfully recommends that they be left to their operation.

JOHN S. D. THOMPSON, Minister of Justice.

SCHEDULE.

Chap. 1. An Act granting to Her Majesty the moneys required for the expenses of the Government, for the financial years ending on the 30th June, 1888, and on the 30th June, 1889, and for other purposes connected with the public service.

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Chap. 3. An Act to provide for the replacing of destroyed originals of the Statutes.

Chap. 4. An Act to reduce the quorum of the Legislative Assembly to fifteen members.

Chap. 5. An Act to provide for the replacing of the Speaker of the Legislative Assembly in certain cases.

Chap. 6. An Act respecting the Legislative allowance.

Chap. 7. An Act to declare indemnified certain members of the Legislative Assembly.

Chap. 8. An Act respecting the appointment of a President of the Executive Council of the Province.

Chap. 10. An Act to amend the Quebec License Law.

Chap. 11. An Act to impose certain direct taxes on certain commercial corporations.

Chap. 12. An Act to provide for the settlement of certain questions in dispute between the Provinces of Quebec and Ontario by means of arbitration.

Chap. 13. An Act respecting the settlement of the Jesuits' Estates.

Chap. 14. An Act to amend the Act 48 Vic., Chap. 7, respecting Agriculture.

Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council on the 22nd January, 1889.

On a report dated 16th January, 1889, from the Minister of Justice stating with reference to a Petition from the Dominion Evangelical Alliance and also to a Petition from the Presbytery of Montreal in connection with the Presbyterian Church in Montreal, praying for the disallowance of an Act passed at the last session of the Legislature of the Province of Quebec, entitled: "An Act respecting the settlement of the Jesuit Estates," that before the Petitions in question came before him for his consideration, he had already recommended to Your Excellency in Council that the Act in question should be left to its operation.

The Minister further states that the Memorials referred to have not convinced him that such recommendation should be changed. The subject-matter of the Act is one of Provincial concern only, having relation to a fiscal matter entirely within the

control of the Legislature of Quebec.

The Committee concurring in the above report of the Minister of Justice, advise that the Secretary of State be authorized to communicate a copy of this Minute, if approved, to the Petitioners for their information.

JOHN J. McGEE, Clerk Privy Council.

DEPARTMENT OF JUSTICE, CANADA, OTTAWA, 16th January, 1889.

To His Excellency the Governor General in Council:

The undersigned, to whom has been referred a Petition to Your Excellency from the Dominion Evangelical Alliance, and also a Petition from the Presbytery of Montreal in connection with the Presbyterian Church in Montreal, praying for the disallowance of an Act passed at the last session of the Legislature of the Province of Quebec, entitled: "An Act respecting the settlement of the Jesuit Estates," has the honor to report as follows:—

Before the Petitions in question came before him for his consideration the undersigned had already recommended to Your Excellency, that the Act in question

should be left to its operation.

The Memorials referred to have not convinced the undersigned that that recommendation should be changed. The subject-matter of the Act is one of Provincial concern only, having relation to a fiscal matter entirely within the control of the Legislature of Queb.c.

The undersigned respectfully recommends that a copy of this report, if approved,

be sent to the Petitioners for their information.

92 SHUTER STREET, MONTREAL, 12th October, 1888.

To the Honorable J. A. CHAPLEAU, Secretary of State.

DEAR SIR,—I am instructed to forward the accompanying Memorial for presentation to His Excellency the Governor General in Council.

I have the honor to be, your obedient servant,

JAMES PATTERSON, Clerk of Montreal Presbytery.

To His Excellency the Governor General in Council assembled:

The Memorial of the undersigned humbly showeth:-

That the Presbytery of Montreal, of the Presbyterian Church in Canada, did, at a meeting held in the David Morrice Hall, Montreal, on the third day of October, one thousand eight hundred and eighty-eight, adopt the subjoined resolutions, which we are instructed to forward for the consideration of Your Excellency in Council. We beg respectfully to call the attention of Your Excellency in Council to the important subject embraced in said resolutions; and we crave that such action be taken in the premises as to Your Excellency in Council may seem meet.

And your Memorialists, as in duty bound, will ever pray.

JAMES FRASER, Moderator,
JAMES PATTERSON, Presbytery Clerk,
D. H. MAGVICAR, D. D., LL.D.,
ROBERT CAMPBELL, D.D.,
D. COUSSIRAT, B.A., B.D.
JOHN CAMPBELL, M.A., S.T.P.,
RIEUL P. DUCLOS,
DAVID W. MORRISON,

Members of Committee.

RESOLUTIONS.

Whereas, by recent legislation of the Province of Quebec, a large sum of money was voted out of what is known as the "Jesuits' Estates," which upwards of a'century ago became public property, and has been since looked to as available for educating the people of the Province, irrespective of race or religious belief—\$400,000 to the Society of Jesus, and \$60,000 to the Protestant Committee of the Council of Public Instruction.

The Presbytery of Montreal avails itself of this opportunity of expressing strong disapproval of the same, and of declining, so far as it has a right to voice public

opinion, to be a party to it.

The Presbytery further expresses astonishment that the Provincial Legislature, not content with granting powers of incorporation to the Jesuits, should have gone out of its way to foster, in a mixed community, a society which has proved itself the enemy of civil and religious liberty all over the world, and which even the Governments of Roman Catholic States have found it necessary to expel.

The Presbytery also protests earnestly against the action of the Quebec Legislature in violating the principle of religious equality which was established in Canada many years ago, by bestowing public money upon a society of a distinctively

religious character, like that of the Jesuits.

Therefore, be it resolved, that this Presbytery memorialize the Governor General in Council to take the foregoing preamble and resolutions into consideration and adopt such measures as will protect the rights of the people of this Province in the premises.

To His Excellency The Right Honorable Frederick A. Stanley, Baron Stanley of Preston, G.C.B., Governor General of the Dominion of Canada, in Council:

The Petition of the undersigned humbly sheweth:

That whereas at a meeting of the Evangelical Alliance for the Dominion of Canada held in the City of Montreal, in the month of October, in the year of Our Lord one thousand eight hundred and eighty-eight, certain matters touching the interests of the several Protestant Churches were taken into serious consideration, among which was "The Act respecting the Jesuits' Estates," passed by the Legislature of the Province of Quebec and assented to on the 12th of July, 1888, now lying before Your Excellency in Council for consideration;

And whereas "the Estates of that (the Jesuit) Order were originally granted by the King of France for the purpose of educating the natives of the country," and the Jesuits were merely depositaries thereof for the purposes of the education of

the youth of the Province;

And whereas the Order of the Jesuits was suppressed in France in 1761 and its

property taken by the King for the purposes of education;

And whereas the Royal Instructions to the Governor General of Canada in 1774 directed "that the Society of the Jesuits should be suppressed and dissolved and no longer continue a body corporate and politic, and that all their rights, privileges and property should be vested in the Crown;"

And whereas the House of Assembly for the Province of Quebec repeatedly petitioned the King or his Representative that the said estates might be devoted, according to their primitive destination, for the education of the youth of this

country, and be placed at the disposal of the Legislature for that purpose;

And whereas on the 7th of July, 1831, Lord Goderich, then Secretary for the Colonies to King William IV, addressed a despatch to His Majesty's Representative in Quebec in which he stated that "the Jesuits' Estates were, on the dissolution of that Order, appropriated to the education of the people," and further, "that the revenue which might result from that property should be regarded as inviolably and exclusively applicable to that object;" and moreover, "that the King, cheerfully and without reserve, confided the duty of the application of those funds for the purposes of education to the Provincial Legislature;"

And whereas the disposal of the said estates has been from time to time impeded by the "energetic representations" of the authorities of the Roman Catholic Church,

asserting a claim to their "ownership;"

And whereas the Government of the Province of Quebec, in the negotiations with the representative of the present Order of the Jesuits in the Province of Quebec forming the basis of the Jesuits' Estates Act of 1888, expressly declared "it did not recognize any civil obligation, but merely a moral obligation, in this respect," and proceeded to treat on the amount and terms of compensation in money on condition of receiving a full renunciation of all further claims on the said estates;

And whereas by the said Jesuits' Estates Act of 1888, the Lieutenant Governor in Council is authorized to pay the sum of four hundred thousand dollars "out of any public money at his disposal" for the purpose of such compensation, "to remain as a special deposit until the Pope has ratified the said settlement and made known his

wishes respecting the distribution of such amount in this country;"

And whereas the said Jesuits' Estates Act recognizes powers in the Holy See that are perilous to the supremacy of the Queen, in thus requiring its consent to legislation within Her dominions, and the application of public funds, and in accepting such terms as "The Pope allows the Government to retain the proceeds of the sale of the Jesuits' Estates as a special deposit to be disposed of with the sanction of the Holy See;"

And whereas your Petitioners contend that not even a "moral obligation" exists to make "compensation" for property duly and lawfully taken by the Crown,

to the extinction of all "civil obligation;"

And whereas, from the whole tenor of the negotiations on this matter, it is to be surely expected that the Holy See will apportion at least a large share of the aforementioned \$400,000 to the Order of the Jesuits' which does not represent the Roman Catholic Church or population of Quebec as a whole but itself alone, and is confined by law to two Archdioceses and one Diocese;

And whereas no stipulation is made that the said \$400,000 shall be devoted to Public Education or any account be rendered to the Government of the use made of

such public money;

And whereas any further proceeds of the sale of the Jesuits' Estates are not secured for the purposes of education, but pass into the general revenue of the

Province;

And whereas, finally, the appropriation in the said Jesuits' Estates Act of the sum of Sixty Thousand Dollars to be invested by the Protestant Committee of the Council of Public Instruction for the benefit of Protestant Institutions of Superior Education, though urgently needed and justly due, though unlike the \$400,000 available for the entire population of one class alike, and though, by contrast again to be administered under public accountability, is liable nevertheless to be interpreted as making the Protestant Community consenting and approving parties to that appropriation of the \$400,000 to which the grave objections above recited have to be made;

Therefore, that your Petitioners, being duly authorized on this behalf by the aforesaid Evangelical Alliance, do enter their solemn protest against the Act in

question being carried into effect.

And humbly pray that it may be disallowed by Your Excellency in Council as provided by the British North America Act of 1867.

JNO. MACDONALD, President. WM. JACKSON, Secretary.

MONTREAL, 10th January, 1889.

THE MANSE, KINGSTON, KENT Co., N.B., 19th Jan., 1889.

RIGHT HONORABLE SIR,—I have the honor to forward through you to the Government of the Dominion of Canada a petition from the Presbytery of Miramichi, of the Canadian Presbyterian Church, in reference to the grant recently voted by the Quebec Government. By bringing it under the notice of your Government, you will greatly oblige,

Your humble servant,

WM. HAMILTON.

Right Honorable Sir John A. Macdonald, Ottawa.

Unto the Honorable Sir John A. Macdonald, and other members of the Government of the Dominion of Canada, the petition of the Miramichi Presbytery in connection with the Presbyterian Church in Canada, humbly showeth:

Whereas a grant of four hundred thousand dollars has been made by the Government of Quebec on behalf of the educational institutions in that Province

under the control of the Jesuits;

And whereas the granting of such a sum from the common Exchequer of the Province to a particular denomination is manifestly unjust to the residue of the community, and imposes upon the Protestants of Quebec a burden which is irksome and unfair;

And whereas the said grant is calculated to aid the recipients in the dissemination of principles which, in the opinion of several of the Governments of Europe, are destructive of the peace and well-being of the nation;

May it therefore please your Honorable Government to veto the Act conferring

said grant: and your petitioners will ever pray.

In name and by authority of Presbytery.

WM. HAMILTON, Moderator pro tem., N. McKAY, Clerk.

Kingston, Kent Co., N.B., 15th January, 1889.

At Newcastle and within the Hall of St. James Church, there on the 2nd day of January, 1889, the Presbytery of Miramichi being met and constituted, Rev. Wm. Hamilton in the chair.

INTER ALIA:

Rev. Wm. Hamilton and Rev. N. McKay were appointed a committee to forward to the Dominion Government a protest against the action of the Quebec Government in handing over a very large amount of public money to the Jesuits in that Province, and a petition praying the Dominion Government to disallow the Act conveying the said grant.

Extract from the Presbytery minutes by

N. McKAY,

Pres. Clerk.

CHATHAM, 15th January, 1889.

House of Commons, Canada, Ottawa, 28th February, 1889.

SIR,—I send you herewith enclosed, a petition to His Excellency the Governor General from the inhabitants of the Village of Huntingdon and its vicinity in the Province of Quebec.

I have the honor to be, Sir, your obedient servant,

J. SCRIVER, M.P.
For Co Huntington, Prov. of Quebec

Capt. the Hon. CHARLES COLVILLE, Sec. to His Excellency the Governor General.

To His Excellency the Right Honorable Frederick A. Stanley, Baron Stanley of Preston, G.C.B., Governor General of the Dominion of Canada &c., &c., &c., in Council.

The petition of the inhabitants of the Village of Huntingdon and its vicinity in

the Province of Quebec, humbly sheweth:

That by the British North America Act of 1867, section 93, sub-section 3, it is provided that "An appear shall lie to the Governor General in Council from any act or decision of any Provincial Authority affecting any right or privilege of the Protestant minority of the Queen's subjects in relation to education."

That a case for such an appeal has arisen in the passing by the Legislature of the Province of Quebec in 1888, of an Act respecting the settlement of the "Jesuits Estates," whereby a large and valuable property pledged by the "Crown" inviolably and exclusively to public education, is diverted from that object and made over to the general public funds of the Province.

That as the Jesuits' Estates were given over by the Crown to be held in perpetuity for the education of the youth of Lower Canada, your petitioners protest alike against their sale and the distribution of the proceeds among Sectarian institutions.

Wherefore your petitioners earnestly pray Your Excellency to intervene in such manner as may to your wisdom seem best, in order that justice may be done in the premises.

And your petitioners, as in duty bound, will ever pray.

In name and by order of the petitioners.

ANDREW McCALLUM, Chairman. JAMES WATSON, Secretary.

Given at Huntingdon, Quebec, 27th February, 1889.

To His Excellency the Right Honorable Sir Frederick Arthur Stanley, Baron Stanley of Preston, Governor General of Canada, in Council.

MAY IT PLEASE YOUR EXCELLENCY.

By the authority and acting on behalf of the members of Loyal Orange District Lodge No. 4, Ottawa, loyal subjects of Her Most Gracious Majesty, the petition of the undersigned humbly showeth:

That whereas your petitioners have heard with surprise and alarm that on the twelfth day of July, 1888, an Act entitled: "The Act respecting the Jesuits' Estates," which had been passed at its last Session by the Legislature of the Province of Quebec, received the assent of His Honor the Lieutenant Governor. That the said Act authorizes the Lieutenant Governor of that Province to pay out of any public money at his disposal the sum of \$400,000 for the purpose of compensating the present Society of Jesus for certain estates which had formerly been given in trust by the Kings of France, for the education of the inhabitants of Canada, to the former Society of Jesus, but which, in consequence of the dissolution of the said Society in 1774, had been confided to the Provincial Legislature, by command of His late Majesty King William IV, in the year 1831, for the purposes of education and that the revenue resulting from the estates might be recorded as inviolably and exclusively devoted to that object.

That the said Act furthermore provides "That the said sum of \$400,000 shall remain as a special deposit until the Pope has ratified the said settlement and made known his wishes respecting the distribution of such amount in this country," thereby recognizing the authority of a foreign Bishop in the disposal of public funds derived from the taxation of the whole population of the Province of Quebec, Protestant as well as Roman Catholic, in contempt of the supremacy of the Crown as

well as of the rights of the rising generation of Quebec.

That the present Society of Jesus lately incorporated in Quebec, can in neither a legal nor a moral sense be considered as the representative of the former Society of the same name, which was dissolved by a Bull of Pope Clement XIV many years

before the oldest member of the present Society was born.

That the interference of the Jesuits in political affairs and their evil influence on public and private morality, has within the last 200 years been found so unsupportable wherever established, as to compel the enactment of laws repelling them from almost every European country, Roman Catholic as well as Protestant; and that in Quebec itself the Act for their incorporation passed by the Provincial Legislature in 1887, was most strenuously opposed by the highest Roman ecclesiastic in Canada, and by many of the most learned, devoted and loyal Clergymen and laymen of the Roman Faith in Quebec.

That we protest most respectfully, but most earnestly, against any grant of the public money of Canadians to men who maintain in their authorized text books that no obedience is due by Christians to the laws of so-called heretical Sovereigns, meaning

by that term, Protestant monarchs like our present Gracious Majesty.

That, apart from these weighty considerations, no grant of public money has for many years been made to any donominational Associations, and that the initiation of a contrary policy in our mixed community would logically and inevitably lead to constant disputes and struggles for the endowment from the public Treasury of every kind of religious institutions.

We, therefore, respectfully request Your Excellency that, taking these and other weighty reasons into your serious consideration, you may be pleased to refuse your assent to the Act of the Legislature of Quebec respecting the Jesuits' Estates.

And we, your petitioners, as in duty bound, will ever pray.

WILLIAM CHERRY, District Master. T. H. WHITE, District Secretary.

RETURN

(64)

To an Order of the House of Commons, dated the 25th February, 1889, 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.

By Command.

HECTOR L. LANGEVIN,

Acting for the Secretary of State.

OTTAWA, 3rd April, 1889.

List of buildings erected throughout the Dominion of Canada, from 1st July, 1867, to 1st January, 1889, also statement of cost of construction or improvement of same, &c., as called for by order of the House of Commons (Letter No. 96024), dated 25th February, 1889.

	Cost to 1st January, 1889.	Fiscal year when first Appropriation was made.	Remarks.
Nova Scotia.	\$ cts		
Amherst Post Office, &c	12,410 36 4,090 00 7,417 71 11,514 61 36,619 11 32,347 29 3,550 00 41,771 62 3,438 64	1883-84 1883-84 1871-72 1870-71 1878-79 1887-88 1881-82 1883-84 1872-73 1874-75 1874-75 1888-84 1874-75 1888-94 1874-75	\
Total, Nova Scotia	450,460 89	니	

LIST of Buildings Erected, &c. - Continued.

·	Cost to 1st January, 1889.	Fiscal year when first Appropri- ation was made.	Remarks.
	\$ cts.		
PRINCE EDWARD ISLAND.			
Charlottetown Dominion Buildings (old)	69,000 00 97,366 32 6,207 14 1,940 41 8,242 87 1,310 05 4,458 62 34,322 11	1873-74 1883-84 1883-84 1874-75 1883-84 1884-85 1875-76 1883-84	;
Total, Prince Edward Island	222,847 52		
NEW BRUNSWICK. Bathurst Post Office, &c	29,8 63 88 14,121 64 14,028 84 2,069 06 463,268 65 15,295 57 30,521 57	1883-84 1883-84 1872-73 1888-89 1875-76 1883-84 1878-79	Appropriation, military buildings.
Middle Island Quarantine Station Moncton Post Office, &c. Newcastle Custom House	4,286 55 45,194 52 4,830 00 47,655 47 10,956 49 5,588 44 75,797 88 327,705 02 8,064 50 49,338 54	1874-75 1883-84 1872-73 1883-84 1883-84 1874-75 1869-70 1878-79 1882-83 1880-81 1881-92	Destroyed by fire can 20th June, 1877.
do Post Office (old)	178,940 86	1872-73	do
do do (new)	7,308 46 47,784 28 45,290 80 28,867 90 23,325 26 3,416 93	1881-82 1873-74	do
·		- }	1
Total, New Brunswick		-	
Aylmer Post Office, &c. (under construction)	1,317 30 19,486 45 18,267 30 83,513 98 30,208 60	1884-85 1881-82 1886-87 1871-72 1881-82	Appropriation, Military Buildings. Destroyed by fire on 10th May, 1886.
Joliette Post Office (under construction) Lévis Immigrant Sheds Maria Indian Reserve Chapel	11,018 16 67,549 19	1888-89 1871-72	

LIST of Buildings Erected, &c.—Continued.

	Cost to 1st January, 1889.	Fiscal year when first Appropri- ation was made.	Remarks.
Quebec—Concluded. Wontreal Armouries	6,428 60 85,564 79 77,448 11 48,723 72 19,667 23 96,003 32 573 58 1,334 40 66,604 72 48,683 85 5,733 36 15,450 42 16,224 21 378,625 72 27,550 99 1,707 10	1884-85 1870-71 1883-84 1874-75 1871-72 1880-82 1871-72 1880-81 1880-81 1880-81 1882-83 1883-84 1811-72 1870-71 1882-83 1872-73 1880-81 1883-84 1883-84 1883-84 1883-84	Appropriation Mili- tary Buildings.
ONTARIO. Almonte Post Office, &c. (under construction)	34,510 53 46,722 17 3,561 02 63,633 99 36,772 55 4,381 77 34,180 47 555,547 91 9,198 88 58,658 71 43,614 85 19,632 81 62,717 87 34,374 33 22,287 62 33,883 94 6,738 76 6,738 76 347,655 84 113,105 58 113,105 58 113,105 58	1883-84 1883-84 1883-84 1888-89 1888-89 1888-89 1881-82 1881-82 1881-82 1881-82 1881-82 1881-83 1881-83 1881-83 1881-83 1881-84 1882-83 1881-82 1882-83 1881-82 1882-83 1881-82 1882-83 1871-72 1875-76 1875-76 1875-76 1875-76 1875-76 1875-76 1875-76 1875-76 1875-76 1875-76 1875-76	

List of Buildings Erected, &c.—Continued.

	Cost to 1st January, 1889.	Fiscal year when first Appropriation was made.	Remarks.
	\$ cts.		
ONTARIO—Concluded.	-		
do Infantry School	7,425 8 6 122,851 10	1872-73 1886-87	
Napanee Post Office, &c	18,809 09	1886-87	
Orangeville do	21,114.94	1883-84	
Ottawa Drill Hall	30,608 33	1878-79	
do Experimental Farmdo Geological Museum	167,677 50 54,138 03	1886-87 1880-81	
do Parliament Library	301,812 45	1870-71	
do Government Workshops (now Supreme Court)	67,106 01	1874-75	
do Post Office, &cdo Printing Bureau (under construction)	254,866 57 118,946 39	1872-73 1888-89	
do Victoria Hall (purchase and fitting up)	15,326 40	1887-88	
do Wellington Street Block	561,005 36	1882-83	
do West Block (Deptl. Building) Extension Pembroke Post Office, &c. (under construction	462,247 11 11,257 38	1874-75 1886-87	
Peterboro' do	43,092 46	1883-84	
Point Edward Cattle Quarantine Station		1882-83	
Port Arthur Immigrant Shed	9,378 55 50,737 05	1882-83	
Prescott do (under construction)	6,906 59	1883-84 1884-85	
Sarnia Immigrant Building	3,436 21	1882-83	
Stratford Post Office, &c	46,213 89	1881-82	
St. Catharines do St. Thomas Drill Hall (rebuilding)	57,119 09 2,854 56	1880-81 1882-83	
do Post Office, &c	70,197 99	1881-82	
Toronto Custom House	237,489 80	1874-75	
do Examining Warehousedo Inmigrant Sheds	339,751 95 33,318 76	1874-75 1870-71	
do Inland Revenue Building	5,060 49	1985-86	
do Post Office	170,013 46	1870-71	
Trenton Post Office, &c	22,572 26 71,390 43	1886-8 7 1878-79	
	11,000 10	1010-10	
Total Ontario	4,877,688 47	-	
		1	
v.			
MANITOBA.			
Brandon Experimental Farm (under construction)	1,272 89	1889-90	
do Immigrant Shed	22,564 58	1881-82	
do Post Office	5,314:10 1,186:10	1888-89 1882-83	
Minnedosa do	1,071 50	1886-87	
Stoney Mountain Penitentiary	438,673 58	1873-74	
do Dominion Lands Office	45,439 27 16,426 41	1872-73 1872-73	1
do Drill Shed	24,628 66	1884-85	
de Fort Osborne Barracks	8,406 83	1883-84	Appropriation, mili-
do Immigrant Shedsdo Infantry School		1871-72	tary buildings.
do Post Office, &c. (old)	15,188 75 43,125 31	1887-88 1872-73	
do do (new)	207.497 82	1882-83	
do do (temporary)		1883+84	
do Powder Magazine	7,765 95	1883-84	
Total Manitoba	884,073 42		! :
		- {··	\$31 · · · · ·

LIST of Buildings Erected, &c.—Concluded.

		Fiscal	
	Cost to 1st January, 1889.	year when first Appropri- ation was made.	Remarks.
NORTH-WEST TERRITORIES.	\$ cts.		
Banff Mounted Police Barracks	529 73	1889-90	
Battleford Industrial School	3,382 00 114,711 25	1875-76 1877-78	
do Mounted Police Barracks	121,007 31	1875-76	
do Stipendiary Magistrate's Office (destroyed by fire during the rebellion)	9 492 94	1884-85	A manusant Atam mut
Rirtle Immigrant Shed	2,433 24 1,047 50	1886-87	Appropriation, pub- lic build'gs, N.W.T.
Calgary do Dalia Banasha	6 592 67	1884-85	8.,
do Mounted Police Barracks	36,514 37 1,000 00	1876-77 1887-88	
Fort McLeod do	75,449 61	1876-77	
Fort Pelly do	0.,.0,02	1874-75	
High River Industrial School	21 635 94	1885-86 1885-86	
Indian Head Experimental Farm	6 142 10	1887-88	
Lathbridge Mounted Police Barracks	44 120 51	1885-86	
McLeod Custom House Storehouse	1 000 00	1887–88 1887–88	
Monla Creek Mounted Police Barracks	29 779 69	1883-84	ļ
Medicine Hat Immigrant Shed	6,748 78	1884-85	
Prince Albert Court House and Jail	28,102 35 33,938 92	1885-96 1883-84	
Mounted Police Barracks	74 943 98	1884-85	1
Qu'Appelle Immigrant Sheds	23,157 55 42,509 07	1883-84	
do Mounted Police Barracks	4 534 66	1885-86 1885-86	
Paring Council Chamber	9,877 40	1883-84	
do Court House do Indian Uffices	6,169 68	1886-87 1885-86	
do Industrial School (under construction)		1889-90	
do Jail and Lunatic Asylum	53,123 91	1884-85	
do Lieutenant Governor's Residence	19,821 44 149,517 90		
do Post Office &c.	.] 8 361 12		
do Riding and Drill Hall	. 26,425 90	1885-86	1
Touchwood Hills Mounted Police Barracks Wood Mountain do	413 00 1,565 60		
Total North-West Territories		-	
British Columbia.	1,046,489 09	-	i
	10.150.00	1000.01	1
Albert Head Quarantine Station (Vancouver) Nanaimo Post Office, &c	33 375 08	1883–84 1881–82	
New Westminster Penitentiary	257,754 73	1873–74	
do Post Office, &c	26,751 63		
do Immigrant Shed	3,030 21		
do Marine Hospital	18,635 3	1872–73	
do Post Office	12,000	-1	
Total British Columbia	433,791 76	3	
England.		1	
London High Commissioner's House	42,702 50	1883-84	

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, 30th March, 1889.

O. DIONNE, Accountant

RETURN

(66)

- To an ORDER of the House of Commons, dated the 25th February, 1889, 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 the 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.

By order.

HECTOR L. LANGEVIN,

OTTAWA, 26th March, 1889. Acting for the Secretary of State.

AUDITOR GENERAL'S OFF CE, OTTAWA, 22nd March, 1889.

SIR,—I return herewith the order of the House of Commons with reference to the expenditure under Dominion Franchise Act.

In answer to Item 1 of the order I beg to submit the following statement of the expense to 1st January, 1889, on account of the preparation, publication and completion of the Lists upon which the last General Election was held:—

(a.) (b.) (c.) (d.)	do do	printing revisors' salaries clerks and bailiffs other expenses	93,767 79,494	94 93
		onse to 1st January, 1889		

(e.) There are claims still unsettled amounting to... 5,264 49

I have the honor to be, sir, your obedient servant,

J. L. McDOUGALL, Auditor General.

G. POWELL, Esq., Under Secretary of State.

DEPARTMENT OF PUBLIC PRINTING AND STATIONERY,
OFFICE OF THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY,
OTTAWA, 13th March, 1889.

SIR,—In reply to your application to be furnished with any information to be derived from the records of this department, to complete a return to the order of the House of Commons showing the expense incurred up to February, 1839, in connection with the preparation of the second votors' lists, under the Dominion Franchise Act,

I have the honor to submit the following statement:—

(a.) Type and other material	\$ 63,849	80
(b.) Composition and presswork	18,511	04
(c.) Paper		11
(d.) Rent and steam power		00
(e.) Proof reading		
Ĭnk		50
Stationery, &c	6	29
Revising copy for printers, &c	885	50
Revising copy for printers, &c Erection of shed, &c	601	80

\$86,313 04

I have the honor to be, sir, your obedient servant,
B. CHAMBERLIN, Queen's Printer and Controller of Stationery.

RETURN

(63)

To an ADDRESS of the SENATE, dated the 19th day of 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.

By Command.

HECTOR L. LANGEVIN,

Acting for the Secretary of State.

OTTAWA, 10th April, 1889.

List of the Veterans of the War of 1812, who received \$30, voted by Parliament during the Session of 1888.

George Annable, Aultsville, Stormont, Ont. Augustin Asselin, Côteau Station, Que. Alexis Aubin, St. Félix de Valois, Que. Eli Babcock, Harrowsmith, Ont. Aloah Bennett, Wolfe Island, Ont. Jean Marie Bissonnette, Fournier, Ont. Joachim Bissonnette, St. Eugène, Ont. Joachim Bissoniette, St. Lagelet, One Elise Boivin, St. Iréné, Que. Conrad Bougard, Picton, Ont. François Boucher, Waterloo, Que. Daniel Cameron, Brownsdale, U.S.A. Amos Card, Moscow, Ont.
Gabriel Cedilot, St. Zotique, Que.
J. B. Chalifoux, Ste. Rose, Que.
S. S. Chapman, Studholm, N.B.
Etianna Chatalan. Etienne Chatelain, Curran, Ont. H. Cholette, St. Polycarpe, Que. R. Clendenning, Humbuston, Ont. Alexis Coutu, Berthier (en haut), Que. Hubert Couturier, Lefaivre, Ont. Paul Diameau, St. Hyacinthe, Que. J. B. Derocher, Curran, Ont.
J. Duval, St. Zotique, Que.
Daniel Field, Chatham, Ont.
J. B. Gauthier, Sorel, Que. A. Gauthier, St. Charles, Que.
Alexis Gervais, Montreal, Que.
Augustin Gingras, St. Sauveur, Quebec, Que.
M. Gironard, Bouctouche, N.B. M. Girouard, Bouctoucne, N.B.
François Goselin, North Stukeley, Ont.
Pierre Hamel, St. Flavien, Que.
Joseph Harvey, St. Alexis, Que.
Joseph Harris, Gore's Landing, Ont.
Tyrus Hawley, Enterprise, Ont.
J. P. Huyck, Belleville, Ont.
A. Jeannotte, Pointe aux Trembles, Que.
G. W. Johnson, Clarenceville, Que.
John Johnson, Oakleaf. Ont. John Johnson, Oakleaf, Ont.

A. Joyal, St. François du Lac, Que.

E. Ketcheson, Belleville, Ont.

Col. A. Konkle, Beamsville, Ont. Pierre Lacoste, St. J. an, Que. Joseph Lacombe, Lavaltrie, Que.

Chs. Lefrance, Ste. Luce, Que. Joseph Lalonde, St. Polycarpe, Que. J. M. Landriau, Ripon, Que. Hilaire Laguerre, Ste. Anne de la Pérade, Que. Hilaire Laguerre, Ste. Anne de la Péra W. Lattimer, Napanee, Ont. François Laurin, Gatineau Point, Que. Pierre Lavallé, Sorel, Que Olivier Lavoix, Baie St. Paul, Que. Geoffrie Lefebvre, St. Rémi, Que. Jacques Lefebvre, St. Rémi, Que. François Legault, St. Timothée, Que. John G. Lloyd, Gananoque, Ont. J. W. Loucks, Morrisburg, Ont. J. W. Loucks, Morrisburg, Ont. J. Marleau, St. Polycarpe, Que. Frank Martin, Moulinette, Ont. John Mingle, St. Ann's, Ont. D. Mitchell, Baldwio, Ont. H. McDonald, Malignant Cove, N.S. H. McDonald, Malignant Cove, N.S. W. H. McEwan, Moore, Ont. D. Oiser, Codrington, Ont. A. Ouellet, St. Augustin, Que. J. Palmer, Dorchester, N.B. J. Palmer, Dorchester, N. B.
Pierre Patenaude, Sherrington, Que.
A. Raiche, St. Camille, Que.
Marcus Redmond, West Winchester, Ont.
P. Renaud, Lavaltrie, Que.
J. Rich, Brownington, U.S.A.
Chas. Roy, Middleton, U.S.A.
P. Sakokanni Caughnewage, One P Sakokenni, Caughnawaga, Que. Ambrose Savoie, St. Barthélémi, Que. Wm. Scriver, Lacolle, Que. Robt. Sellars, Kingston, Ont. Horace Sheldon, Portland, Ont. David Sliter, Warburton, Ont. D. Smith, Williamstown, Ont. M. Sonorese, Caughnawaga, Que. John Spruny, Brighton, Ont.
P. C. Terriault, St. Arsene, Que.
François Tessier, Ste. Anne de la Pérade, Que.
John Tillotson, Mountain View, Ont. Henry Vanluven, Battersea, Ont. John Vaughan, Easton's Corners, Ont. John Waldorff, Moulinette, Ont.

List of the Veterans of the War of 1812, &c.—Concluded.

Jean Bilodeau, St. Henri, Que.
T. Bouliane, Roberval, Que.
Joseph Côte, St. Ferdinand, Que.
Louis Faucher, Axtell, U.S.A.
W. B. Turner, Knoxford, N.B.
A. Bonamy, St. François Xavier, Man.
Jacques Cadieu, Rigaud, Que.
Joseph Ivon, East Saginaw, U.S.A.
John Landon, Fitzroy Harbor, Ont.

A. R. McDonald, Greenfield, Ont. Hill Sliter, Sweet's Corners, Ont. Pierre Bray, St. Polycarpe, Que. Chas. Camiré, Chester, West, Que. François Sevigny, St. Esprit, Que. Denis Lefebvre, Montreal, Que. J. McNaughton, Glen Robertson, Ont. Michel Lemaire, St. Brigide, Que. François Voisard, Louiseville, Que.

OntarioQuebec	52 4
Nova Scotia	1
Total	

C. EUG. PANET, Col., Deputy of the Minister of Mil. and Def.

OTTAWA, 26th March, 1889.

RETURN

(76.)

To an Address of the Senate praying for a copy of the report made to the Minister of Public Works, by the Commissioners on the Floods in the St. Lawrence River.

By order.

HECTOR L. LANGEVIN.

Acting for the Secretary of State.

OTTAWA, 24th April, 1889.

OTTAWA, 20th April, 1889.

Sir,—I am directed to send you herewith in compliance with Order of the Senate, No. 4, 1889, copy of the report by the Commissioners on the floods in the St. Lawrence River, a synopsis of papers sent, and the communication received from your Department.

I have the honor to be, sir, your obedient servant, G. F. BAILLAIR & E, Deputy Minister.

GRANT POWELL, Esq., Under Secretary of State, Ottawa.

SYNOPSIS.

Date	۶.	•	Ref. No.	. —	Page.
1886	3.				
May Aug.	24 20	From Annual Report From City Clerk, Montreal	68134 70083	Reports of the Montreal Flood Commission About co-operation with the City of Mont- real by other municipalities and com- panies interested concerning the con-	1
do	23	From Chief Engineer	70084	struction of the proposed dyke or levee at Montreal	9
do	25	To City Clerk, Montreal	70164	towards the construction of the dyke Telegram.—So soon as members of the	9
do			70515	Privy Council have returned to town letter 70083 will be submitted to Council Report of the Special Committee on Inundations appointed by the Council of the City of Montreal, on the 14th Jan-	9
July Oct.	13 6	From Secv. Municipal Council.	1	uary, 1884 Answer to letter 70083 Transmits a copy of a resolution of the	9 70
		76 — ▲		Municipal Council of Laprairie in con- nection with periodical inundations of the village, &c., &c	70

SYNOPSIS.—Concluded.

33-4-		D. C. St.		D
Date.		Ref. No		Page
1886.				
∛o∀. 8	From Harbor Commissioners Montreal	72307 .	Offer to place four of their tugs at the disposal of the Department for experiment of ice breaking in and about the Harbor	72
do 10	Order in Council	72454	of Montreal	
do 16	From City Clerk, Montreal	72486	meeting of the Finance Committee with reference to the proposed experiment suggested by the Commissioners ap- pointed to enquire into the causes of the	72
do 25	From City Clerk, Montreal	72666	floods at Montreal	73 73
1887.		72755	Offering suggestions respecting proposed improvements at Laprairie, re inundations	74
Mar. 10	From Montreal Flood Commission	75274	Recommends immediate action to be taken to clear the ice and the experiment of using explosives to that end	75
do 16 April 7	From Chief Engineer Order in Council	75275 76020	Reports on 75274	75
do 20	From Mayor of Laprairie	76343	harbor improvements at Laprairie. &c , and works of protection against inun-	76
do 3 0	From City Clerk, Montreal	76582	Transmits extract from the minutes of a	76 79
	From Chief Engineer		meeting of the Finance Committee Reports on 76343	78 79
••• •••	From Accountant, Department of Public Works	77829	Montreal on the subject of inundations.	79 82

Reference No. 68,134.

MONTREAL FLOOD COMMISSION.

REPORTS OF THE COMMISSION

APPOINTED by Order in Council of 28th May, 1886, to "Enquire into the causes of the floods at Montreal, and to suggest the necessary remedies to prevent their recurrence"; together with Order in Council appointing the Commission, and Report of the Chief Engineer of the Department of Public Works.

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 24th May; 1886.

On a Memorandum dated 22nd May, 1826, from the Minister of Public Works, representing that a number of communications have been received from the City Council, Board of Trade, Corn Exchange Association, &c., of the city of Montreal, asking that a Commission be appointed by the Government to enquire into and report upon the causes which lead to the floods which annually devastate the city of Montreal;

That the City Council has offered to pay one half the expense of such a Commission on condition that it be allowed to nominate one of the Commissioners, and that Mr. Walter Shanly, C.E., has been suggested as the representative of the City

Council on such Commission:

The Minister recommends that a Commission be appointed to enquire into the causes of the floods at Montreal, and to suggest the necessary remedies to prevent their recurrence, and that such Commission be composed of Messrs. H. F. Perley, C.E., Chief Engineer of the Department of Public Works, as representing the Department, T. C. Keefer, C.E., as representing the Board of Trade and Corn Exchange Association of Montreal, John Kennedy C.E., as representing the Harbor Commissioners of Montreal, and Walter Shanly, C.E., as representing the City Council of Montreal—it being expressly understood that the latter gentleman is to be remunerated for his services wholly by the City Council, and that he is not to be paid in any way by the Government.

The Committee concur in the foregoing recommendation and submit the same

for your Excellency's approval.

JOHN J. McGEE, Clerk Privy Council.

Reference No. 68,134.

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 28th May, 1886.

The Committee, on the recommendation of the Minister of Public Works, advise that the Order in Council of the 24th instant authorizing a Commission to investigate the causes of the annual floods at Montreal be rescinded, and that in lieu thereof Messrs. H. F. Perley, C.E., as representing the Department of Public Works, T. C.

76-1

Keefer, C. E., as representing the Board of Trade and Corn Association of Montreal, John Kennedy, C. E., as representing the Board of Harbor Commissioners of Montreal, and Percival W. St. George as representing the City Council of Montreal, be appointed a Commission to enquire into the causes of the floods at Montreal, and to suggest the necessary remedies to prevent their recurrence; it being understood that one-half of the expense of such Commission is to be paid by the city of Montreal. Reference No. 69,816.

JOHN J. McGEE, Clerk Privy Council.

MONTREAL FLOOD COMMISSION, MONTREAL, 31st July, 1886.

SIR,—The Commissioners appointed to "enquire into the causes and suggest remedies" for the ice floods at Montreal, immediately upon their organization last month, made arrangements for the land and river surveys and the investigations necessary in dealing with so great a question, and these are now being actively

prosecuted.

The Commissioners, conscious of the great desire on the part of the citizens of Montreal that every possible effort should be made to prevent the recurrence of the disastrous floods of April last, took immediate steps to deal with the protection of the district south of the Lachine Canal, relative to which a charter was obtained at the last session of Parliament for the construction of a dyke or levee. They have prepared, and herewith submit, a plan showing the position of the site proposed for this dyke, together with an estimate of the probable cost.

The area which would be protected by this dyke is bounded by the Lachine Canal, the River St. Pierre, the tail-race of the Montreal waterworks and the River St. Lawrence, from the city limits, as far down as the waste weir at Tate's dry dock, and includes nearly the whole of the municipality of St. Gabriel, excepting the islands in

the St. Lawrence.

The area protected within the limits of the city of Montreal is about 360 acres, and in St. Gabriel about 300 acres. The assessed value of this area is nearly

\$5,000,000, of which about \$1,800,000 is in St. Gabriel.

The route of the dyke is along the present road and top of river bank, from Tate's dry dock to a point about 3,000 feet above the Victoria Bridge. Here it turns inland, crossing the city limits at the rear of the property belonging to the Estate Knox and strikes the tail race embankment near Wellington Street—otherwise known as the Lower Lachine Road—passing in rear of the farm house on the property of the Congregational Nuns.

The tail race bank is now being raised by the city to the level proposed for the top of this dyke, which is 29 feet above city datum or summer level of Montreal harbor. The level of top of dyke would be 1 foot 6 inches above highest level of floods of April last, and is nearly the same as the coping of Tate's dry dock, as also

of the rails of the Grand Trunk Railway where crossed by the dyke.

The connection of the head of the tail race with the Lachine Canal bank com-

pletes the route of the dyke.

The estimated cost of the dyke and the necessary pumping plant and drainage works required in connection with it will be about \$85,000. The land is valued at about \$35,000, making a total of \$120,000. The land valued is much more than will be required for the site of the dyke, as it includes the whole of such building lots as are affected by the close proximity of the embankment, also a considerable acreage of low ground, which is not suitable for building purposes, from which it is proposed to take the material required for the embankment.

The estimate for the drainage and pumping works also includes sewers, which, though now only wanted in connection with a dyke, will ultimately be of value to

the city as sewers.

The estimate, and the right of way provided for, are for a dyke alone, but the

culverts are lengthened to admit of widening the dyke for a future roadway.

The final location, breadth, &c., may be modified by arrangements with the proprietors. These are few in number and the most important of them are quasi-public hodies...

The Commissioners think it probable that it may be decided to construct at once the levee, on account of its simplicity, certainty of effect, the small amount of damage or inconvenience to be caused by it, and its moderate cost in proportion to the large amount of property it would benefit, as well as because any alternative scheme

involves delay and the risk of further possible damage.

The protection of the remainder of the exposed dis

The protection of the remainder of the exposed district of the city, north of the Lachine Canal by raising the river front, is a work of much greater magnitude, involving as it does the almost entire reconstruction of the revetment wall. In connection with the plans and estimates required to show the cost of this work, the Commissioners are now conducting surveys and investigations for the purpose of accertaining the practicability and probable cost of diminishing the floods, and of reducing them within harmless limits, by means of river works.

We have the honor to be, sir, your obedient servants,
THOS. C. KEEFER,
HENRY F. PERLEY,
JOHN KENNEDY,
PERCIVAL W. ST. GEORGE.

Commissioners.

A. Goberl, Esq., Secretary Department of Public Works, Ottawa.

ESTIMATED COST OF PROPOSED POINT ST. CHARLES AND ST. GABRIEL DYKE.

Embankment, culverts, fencing, &c	37,400 41,600
Engineering and contingencies	79,000 6,000
Land valuation	85,000 35,000
Total	120,000

Reference No. 77,053.

MONTREAL FLOOD COMMISSION, MONTREAL, 5th May, 1887.

SIB,—The Commissioners have the honor to report that they have completed the surveys and observations of the River St. Lawrence in connection with their investigation into the causes and suggestion of remedies for the floods at Montreal. These observations have extended from the ice packs below Morrisburg to Quebec, a distance of 250 miles; but the ice surveys have been confined to the portion of the river between the head of Lake St. Louis and the Platon, about 36 miles above Quebec—the lowest point at which an ice bridge was formed during the past winter.

The object of these surveys, the first of their kind which have been taken in connection with the ice question, was to ascertain the practicability of holding back above Montreal as well as of passing out to sea below Three Rivers a sufficient quantity of that ice which by its packing immediately below Montreal is the sole

cause of the floods.

The field work in connection with these surveys, observations and ice charts was only completed last week, and on account of the many questions involved and the various projects supported by worthy persons, some time will be required to prepare our final report and to put on record the large amount of new and valuable information which has been obtained.

In view of the urgency of the question the Commissioners now beg leave to report the result of their investigations and the conclusions at which they have arrived, in order that prompt action may be taken to protect the city of Montreal before another winter. In the first report, dated 31st July, 1886, the Commissioners presented plans and estimates for a dyke, or embankment, extending from Tate's dry dock at the head of Mill Street, along the river front to the St. Pierre River, at the lower Lachine Road, there to connect with the embankment of the water works tail race, and stated that they thought it probable "that it may be decided to construct at once this levee, on account of its simplicity, certainty of effect, the small amount of damage or inconvenience to be caused by it, and its moderate cost in proportion to the large amount of property to be benefited by it, as well as because any alternative scheme involves delay and the risk of further possible damage."

With respect to the protection of the exposed district north of the Lachine Canal by raising the river front, the Commissioners stated in that report that it was "a work of much greater magnitude, involving as it does almost the entire reconstruction of the revetment wall," and that in connection with this work they proposed to ascertain "the practicability and probable cost of diminishing the floods and of re-

ducing them within harmless limits by means of river works."

The Commissioners have now to report, as the result of these investigations, their opinion, that, while an important diminution of the quantity of ice which is now arrested below Montreal may be effected by river works, or by annual work in the river, which may be the means of averting a flood in certain years—and more especially a winter flood,—in other years they might prove ineffectual for the protection of Montreal, especially against spring floods, and they are forced to the conclusion that there is no absolute certainty of protection for Montreal but in excluding the river by a dyke, or in raising the low districts above flood level.

EXCLUSION OF THE RIVER.

The questions connected with a dyke upon a permanent plan along the front, between the Canal and the Canadian Pacific revetment wall, are of such magnitude that, so long as there was hope of protection in any other direction, the permanent dyking of a portion of the city front must be regarded as a work of last resort.

The raising of Commissioners Street above flood level would be the most simple, permanent and effectual manner of dealing with the question, regardless of all other considerations. But this work calls for the simultaneous reconstruction of the revetment wall of a greater thickness and to a greater height, and upon its present site. Commissioners Street is too narrow for the present, and still more so for the early future requirements of the commerce of Montreal; nor can it at present be widened, because the wharfage width between it and the ships is equally insufficient, and the commerce of the port is of more importance to the city and the Dominion than the width of the street. Commissioners Street, therefore, cannot be widered, nor can its revetment wall be reconstructed where it ought to be for the purpose of a dyke until there is an advance of the whole wharfage front, - which carries with it an advance of the outer or eastern line of the dredged channel for its entire length. Again, the raising of Commissioners Street, to a height of at least six feet, means an unknown amount for property damages along the whole route, and extending inwards toward the city at every connecting street, so far as property would be affected by the rearrangement of street grades. But probably the most serious matter would be the interposition of a rampart, six feet in height, between the city and the port, over which all the tonnage must be carted. About ten years ago a commission of engineers recommended the widening of the wharves and of this street, and we understand that financial reasons alone have hitherto prevented any work being done in this direction; but, as Montreal will soon require all the harbor facilities which her position is capable of, there is very little doubt that this enlargement of the harbor front, and of Commissioners Street, will soon be undertaken, and until this is done it will be necessary to postpone the permanent dyke required as protection from floods.

'ince the report of the engineers above referred to the question of the proper height of wharves, for the accommodation of the larger class of steamers, which the deepening of the river has brought to the port, has been raised. The present level of wharves was adopted when the shipping of the port was confined to vessels of a

few hundred tons. Ocean steamers of many thousand tons now frequent the port in such numbers as to need all the central portion of the harbor, and for these steamers the Commissioners understand a higher level of wharf would be more convenient. The higher the wharf level, the easier the cartage, and the less space occupied by ramps.

Montreal is the only city whose wharves are submerged continuously for five months in the year; and Captain Barclay, for many years in control of the loading and discharging of Allan's steamers, is of opinion that the level of Commissioners Street itself would be the most convenient one for the ships of that line. This, if applied throughout, would practically abolish the revetment wall, substituting the

wharf front in its place.

The Commissioners refer to this question of wharfage height in consequence of its connection with that of a permanent dyke. The thickness and cost of a revetment wall depends upon its height, and as the permanent dyke must be either in connection with a new revetment wall or, in the absence of one, upon a foundation for the level of Commissioners Street, the condition precedent to its location and mode of construction is the settlement of these questions of the new line for the wharves and the height of the same.

The retention of the present level of the wharves with a new revetment wall so placed as to give a hundred feet width to Commissioners Street would, with the present system of wood construction, give the least amount of perishable work, and

would cost about \$1,200,000.

To raise them to the level of Commissioners Street and provide a dyke against

floods above that level would cost about \$1,700,000.

Should it be found advisable to raise the wharf level with its railway tracks and sheds above the winter level of the river—abolishing thereby the revetment wall and its ramps—all that will then be necessary for the protection from floods attaining a higher level will be a permanent dyke or rampart of substantial masonry placed at a safe distance from the wharf front. The safe distance has been established by more than forty years' experience, as that between the revetment wall and the buildings fronting upon it. Openings through this parapet wall for cartage purposes would be closed by stop gates during the flood periods.

If the high or Commissioners Street level be adopted for the wharves along this portion of the city front, permanent sheds, bearing the same distance relation to the wharfage front, as the buildings on Commissioners Street now do to the revetment wall, would be resorted to, and the Commissioners think that the parapet wall could

be utilized in the construction of such sheds.

It would also make possible an elevated railway, reaching the manufacturing

districts at either end of the city without interrupting the traffic of the port.

The annual cost connected with the temporary sheds has been setimated as high as \$10,000. There is a further charge for removal of ice as well as the additional time and cost of cartage in favor of the high level wharf.

Whether these advantages will be considered sufficient to compensate for the

half million dollars greater cost of the high level is in the future.

ELEVATION OF FLOODED DISTRICT.

The raising of the low districts above flood level involves an outlay upon twentysix miles of streets in this district of upwards of one million of dollars, exclusive of
the cost of raising the buildings and lots, and is, in any case, the work of years.
For the purposes of flood prevention the raising of Commissioners Street alone would
be sufficient, and nothing would be gained, except in a sanitary point of view, by
raising any other street or buildings, because pumping must still be resorted to
during floods, after the streets, lots and buildings have been raised, if the cellars are
to be kept dry. It cannot be supposed that this whole district would be raised
another six feet for the benefit of the cellars.

We have already referred to the questions connected with the raising of Commissioners Street, and would only add, upon the question of cost, that nothing is to

be gained in that respect by the raising of the street itself. Its necessary revetment wall would afford the required protection from floods, whether the street were raised or not, and this revetment wall is a necessary adjunct to the raising or maintenance of the street.

As there is, therefore, no means of protecting the river front north of the Lachine Canal upon any permanent plan, in time to provide against the contingency of another flood, the Commissioners have decided to advise the erection of a temporary dyke upon the top of the revetment wall, to be constructed of timber and earth-work, with openings through the same for access to the wharves, which are to be closed when navigation ceases. This can be effected in a short time and at a cost under \$50.000, which includes supporting the revetment wall where required, seeking for and cutting off old drains or leaks connecting with the river, so that the minimum of pumping would be secured.

ESTIMATES.

The present pumping plant was hastily improvised, and cannot be relied upon. It is moreover insufficient in capacity for the work it may be called upon to do during a flood, as there has as yet been no experience in pumping with the river at a higher level than the revetment wall.

For permanent plant about \$46,000 will be required, and this estimate is based upon the carrying out of the intercepting sewer, which we understand has already

been determined upon by the city.

Since our estimate (of July, 1886) for the Point St. Charles dyke some expenditure of a permanent character has been made there for the drainage works, reducing by so much our provision under that head.

The cost of protection work will now be as under:-

Embankment, culverts, fencing, &c., Point St. Charles	\$ 37,400	00
Drainage works	14,000	00
Land valuation	35,000	00
Temporary dyke revetment wall, say	40,000	00
Superintendence, contingencies, &c	6,000	
	\$132,400	00
To which should be added for permanent pumping plant	46,000	00
	8178,400	.00

We have the honor to be, sir, your obedient servants,
THOS. C. KERFER.
HENRY F. PERLEY.
JOHN KENNEDY.
PERCIVAL W. ST. GEORGE.

A. Gobril, Esq., Secretary Department of Public Works. Reference No. 79,824.

MONTREAL FLOOD COMMISSION, MONTREAL, 12th August, 1887.

Sir,—In obedience to your verbal request, made to one of their members, the Chief Engineer of Public Works, the Commissioners have the honor to report that they have prepared plans and estimates for a line of piers and booms at the lower end of Lake St. Louis.

In their report of the 5th May last, the Commissioners stated their belief that an important diminution of the quantity of ice which is now arrested below Montreal may be effected by river works, or by annual work in the river, that is—by holding back the ice above Lachine—or by passing it out to sea below Three Rivers.

Ot these two methods one would be represented by works of construction in the river, requiring only the annual labor of opening and closing the booms, while the other, to be effective would require a capital outlay for properly constructed ice-breaking steamers, and considerable annual expenditure in fuel, wages and repairs. The action of the piers and booms would be independent of the character of the winters, while the cost, and even the practicability of the alternate method would materially depend upon the weather, and it was in view of this that the Commissioners recommended an experiment to be made last autumn with the tug boots of the Montreal Harbor Commission.

The practicability of arresting floating ice when young, and of causing ice to form at points where the current is sufficient to prevent freezing, by means of booms has been established upon the Ottawa River and its tributaries, notably at Deux Rivières, which point we have surveyed in order to compare the currents and conditions there with those in Lake St. Louis, below He Dorval; and we have come to the conclusion that the ice can be arrested at the points proposed by means of piers and booms, without the risk of any afteration in the winter levels of Lake St. Louis.

In the case of Montreal, the Commissioners, while holding the opinion that the stoppage of the ice in early winter below Dorval would reduce the floods, and even render them harmless in certain winters, felt that when the interests at stake were so great and a certain remedy wis within the reach of those interested, it would have been unwise to assume any risks; but as regards the south shore of the St. Lawrence, below the Lachine Rapids, the conditions are reversed, and the only relief which can be expected for that quarter is in the holding back of the ice above Lachine.

The plan of holding back the ice has been publicly advocated from an early date. By whom it was first suggested is unknown to us, but we find it urged in the columns of the Montreal Herald in 1841; and in the report upon the Victoria Bridge by the Chairman of this Commission, in 1853, the opinion was expressed that "a line of piers across this lake, near He Dorval, would very much diminish the annual inundation at Montreal.

Since 1852—the year when the record of winter gauging at Montreal commenced—the river has closed ten times in the month of December, and always without a winter flood. In the other twenty-six years it has closed in January. The effect of severe continued frost, at the beginning of winter, is to close Lake St. Louis, and cut off further supply of ice from above the points where it freezes over, and thus prevent a winter flood, which is the most distressing one.

Again, if the ice were held in Lake St. Louis until the river is open below Montteral, the severity of the spring floods should be diminished. Until last April it was the descent of the lake ice, before the river was open below Montreal, that caused the spring floods; but the shove and flood took place last spring before the lake ice passed below Victoria Bridge. The river below Montreal was so filled with ice, which came down from the city before the Laprairie Basin and Lake St. Louis were closed for the winter, as well as by the ice formed in the open water below this lake throughout an exceedingly severe winter, that it did not need the addition of the lake ice, in the spring, to cause a flood.

The effect of a line of piers and booms below He Dorval will be to prevent the descent of any ice from above them, until the booms are opened in the spring; and also to cover with ice a large portion of Lake St. Louis, extending to a considerable distance above Dorval, which is now an open water factory of frasil and bordage for, which by the action of frost and wind is sent over the Lachine Rapids throughout the winter. The greater part of this ice is carried under the surface through the Laprairie Basin and is packed somewhere between Montreal and Varennes.

The number of piers, each of which will be thirty feet square on foundation, will be niveteen; and the length of two ply boom will be about aftern thousand feet, or nearly three miles. The cost of the whole we estimate at \$70,000. The Commissioners recommend the carrying out of this work as one which, in proportion to its

cost, will in their judgment produce greater beneficial results to the exposed districts outside of Montreal than any other river work they are able to suggest.

We have the honor to be, sir, your obedient servants,
THOS. C. KEEFER.
HENRY F. PERLEY,
JOHN KENNEDY,
PERCIVAL W. ST. GEORGE.

Hon. Sir H. L. LANGEVIN, K. C. M. G., &c., Minister of Public Works. Reference No. 80,648.

CHIEF ENGINEER'S OFFICE, OTTAWA, 8th September, 1887.

SIR,—As per the endorsement by the Hon. the Minister, on Fyle No. 79,824, I am to state the particulars of the works proposed by the "Flood Commission" to be built in Lake St. Louis, for preventing wholly or in part, the passage of ice formed in the early part of each winter in the lake, or brought down into it from Lake St. Francis—down the Lachine Rapids, through the Laprairie Basin, and past Montreal, to jam and accumulate, and thus add to the probability of recurring floods and inundations, not only in that city, but over the southern shore of the St. Lawrence

below the Lachine Rapids.

The Commission has stated fully why they have recommended the construction of piers and booms in Lake St. Louis, and it only remains for me to say that the piers will be 19 in number, each 30 feet square, built with sloping faces on the up atream ends, and properly protected to withstand the run of ice in the spring. These piers are to be placed at the lower end of the lake, and in such positions as will not interfere with navigation, and where a line of shoal water extends from shore to shore, they are to be placed about 500 feet apart, and between them booms will be stretched atter the close of navigation, which, from the experience gained on the Upper Ottawa will have the effect of causing the ice to form completely across the lake early in the winter, and once taken the pressure on the booms will be reduced, and all ice formed in the lake or brought into it, must remain until the breaking up in the spring. At present the ice forms out from the shores (bordage), and is broken up by winds and storms and carried by the current to the foot of the lake, thence through the Lachine Rapids, &c., to and past Montreal, and this process or action continues until the bordage on either side has become connected and a solid unbroken sheet has been formed.

Just before the breaking up of the river in the spring, one end of each boom will be cast loose, and with the flow of the ice they will swing freely and without damage, and can so remain until required to be placed in position for the following

winter.

I have examined the details of the estimate of cost prepared by the Commission, and believe that it will be barely sufficient to cover the cost of the works proposed, as I differ in some points respecting the mode of constructing the piers, for with my experience in connection with the piers built by the Department at Laprairie, Chenal du Moine and Berthier, I am of the opinion that a heavier plan of construction must be adopted. The plan of boom prepared and the fastenings and mode of attachment to the piers are satisfactory.

If these piers and booms are to be of any service next spring, their immediate construction is very desirable, and if they are to be proceeded with and to hasten their speedy completion, the work of construction might be let in several, say five

or more, contracts.

If the foundations can be put in before the ice makes and the booms stretched, and I see not reason to prevent this being done, the superstructures can be completed after the ice has formed, when there will be ample opportunity for the conveyance of materials—notably ballast to each pier.

I am, sir, your obedient servant,

HENRY F. PERLEY, Chief Engineer.

A. Gobril, Esq., Secretary Public Works Department. Reference No. 70,053. CITY CLERK'S OFFICE, CITY HALL, MONTREAL, 20th August, 1886.

SIR,—You are no doubt aware that the Commissioners appointed by the Federal Government to enquire into the cause and suggest remedies for the ice floods in Montreal have submitted a preliminary report recommending the immediate construction of the proposed dyke or levee along the river bank west of Tate's Dry Dock, at an estimated cost of \$120,000.

At the meeting of Council held last Wednesday, that report was referred to a special committee composed of Aldermen Grenier, Laurent, Donovan, Stevenson,

Mooney, Rolland and Hamelin.

At a meeting of that committee held this day, it was resolved—That whereas the proposed improvement is one in which the Federal Government, the municipalities of St. Gabriel and Verdun, the Grand Trunk and Canadian Pacific Railway Companies as well as the city of Montreal are interested, the City Clerk be instructed to write to these several parties to inquire to what extent they will be disposed to co-operate with the corporation of the city of Montreal in meeting the cost of carrying out the projected works. The present letter is therefore addressed to you with a request that you will favor the committee with your answer in time for their next meeting which will take place at three o'clock p.m. next Wednesday.

I have the honor to be, sir, your obedient servant,
CHAS. JLACKMEYER, City Clerk.
Sir Hector Langevin, Minister of Public Works, Ottawa.

Reference No. 70,084.

CHIEF ENGINEER'S OFFICE, DEPARTMENT OF PUBLIC WORKS, CANADA, OTTAWA, 23rd August, 1886.

SIR,—The city clerk of Montreal asks to what extent the Federal Government would be disposed to co-operate with the corporation of the city of Montreal in meeting the cost of carrying out the works proposed by the commissioners appointed by the Federal Government to enquire into the causes and suggest remedies for the flooding of Montreal, for the protection of the Point St. Charles district—so-called.

With reference to this request I beg leave to state that in my opinion the work in question does not possess any federal characteristic, but is one in which the city of Montreal is chiefly interested, and the property to be protected is not owned or controlled by the Federal Government, nor is the flooding of this property, which the works proposed is to prevent, due in any way to causes within the control of the Federal Government.

I am, sir, your obedient servant, HENRY F. PERLEY, Chief, Engineer.

A. Gobell, Esq., Secretary Public Works Department. Reference No. 70,164.

MEMO.—Telegraph Mr. Chas. Glackmeyer that so soon as the members of the Privy Council have returned to town his letter will be submitted to the Council.

H. L. L.

Then lay before me again.

H. L. L.

Reference No. 70,515.

REPORT OF THE SPECIAL COMMITTEE ON INUNDATIONS APPOINTED BY THE COUNCIL OF THE CITY OF MONTREAL, ON THE 14TH JANUARY, 1884.

EXTRACT FROM THE MINUTES OF A MEETING OF THE COUNCIL, HELD ON THE 14TH JANUARY, 1884.

On motion of Alderman Stevenson, seconded by Alderman McShane.
Resolved, That a special committee composed of three members of the council to named to make investigations into the cause of the recent inundation and former

inundations of certain portions of the city, and that they be authorized to associate with them one member of the Board of Trade, and one member of the Corn Exchange, with instructions to report to council, as early as possible, what proceedings may be necessary in order to prevent similar inundations in the future, and that said special committee be composed of Alderman Stevenson, Laurent and McShane.

Certified.

'CHAS. GLACKMEYER, City Clerk.

The same Committee was reappointed on the 10th March, 1884, and on 16th March, 1885.

Members of Committee.

Alderman Stevenson, Chairman. Alderman Laurent D. A. P. Watt, Esq., Robert P. McLea, Esq. дo McShane.

REPORT OF THE INUNDATION COMMITTEE RECOMMENDING A SURVEY FROM VICTORIA. BRIDGE TO BOUCHERVILLE.

To the Mayor and Aldermen of the City of Montreal:

The special committee appointed to consider the question of the periodical inun-

dation of the city of Montreal respectfully report:

That shortly after their appointment a number of meetings were held, and a large amount of valuable information secured, by the examination of witnesses, some of whom appeared at the request of the committee and others volunteered statements on the subject.

The committee made it generally known that they were desirous of collecting together any facts bearing upon the subject, and in order to ascertain whether any observations had been made by the adjoining municipalities, they addressed communirations to the municipal authorities of Hochelaga, Longue Pointe, Boucherville, Varennes, Longueuil, St. Lambert, Laprairie, Verdun and other places in the vicinity. The information obtained from the last mentioned sources was very meagre, as no continuous system of observations appear to have been in any case attempted, and generally it may be said that the want of reliable data on this important subject is somewhat remarkable. As might be expected, wide differences of opinion were elicited as to the causes of, and the remedies for, the flooding of the city of Montreal, it being generally conceded that the conditions producing these inundations vary from year to year.

On two points, however, all agree, that the removal of obstructions now existing between the Victoria Bridge and the Boucherville islands, on both sides of St. Helen's Island, and the general widening and straightening of the deep water channel of the river, are both calculated largely to diminish the liability to inundation, as well as to

mitigate its extent, under all circumstances.

As a result of their present enquiry your committee have therefore no difficulty in reaching a recommendation, to the effect that a careful survey of the bed of the river between the points mentioned, be at once instituted, and they suggest the obvious advantage which would be derived by securing the co-operation of the Harbor Commissioners, who already possess the best existing data and have also the mequisite staff and appliances for immediate work. Their chief engineer, Mr. Kenmedy, estimated that such a survey could be made for a very moderate sum and completed in a few weeks.

Your committee therefore recommend to the council the granting of an appropriation of say \$5(0, for this purpose, that being the amount which Mr. Kennedy

estimates it would cost.

The evidence adduced before this committee, comprising statements made by Masers. John Kennedy, barbor engireer, J. M. Nelson, his assistant, Geo. H. Henshow, C. E., L. Lesage, Supt. M. W. W., P. W. St. George, city surveyor, Alfred Brittain, assistant city surveyor, Captain Chas. Leger, pilot, Alderman Mount, Messrs. T. B. de Grosbois, James Shearer, Joel C. Baker, John Galbraith, J. G. Dinning and C. G. Jones, is submitted herewith, and which, in the opinion of your committee, ought to be printed for future reference.

As this question is of paramount importance to the city of Montreal, your committee suggests the desirability of either continuing the present special committee, to superintend the survey above referred to, or to have this done under such other the survey above referred to the

superintendence as the council may see fit to determine.

The whole nevertheless respectfully submitted.

A. A. STEVENSON, Chairman.

M. LAURENT,
J. MOSHANE, jun.,
T. CRAMP, Representing the Board of Trade.
DAVID A. P. WATT, Representing the Corn Exchange.

COMMITTEE ROOM, CITY HALL, MONTREAL, 10th July, 1884.

Finance Committee's report concurring respectfully report that, as directed by the council, they have considered the accompanying report of the special committee on inundations for an appropriation of \$500 for a survey of the bed of the St. Lawrence, between the Victoria Bridge and the Boucherville Islands, and that they concur in the recommendation therein made.

The whole nevertheless respectfully submitted.

J. GRENIER.
J. FAIRBURN.
M. LAURENT.
J. H. MOONEY.

COMMITTEE ROOM, CITY HALL, MONTREAL, 11th September, 1884.

THE EVIDENCE.

EVIDENCE OF MR. C. G. JONES, REAL ESTATE AGENT.

Build another Bridge.—Montreal Inundation.

Mr. CHAIRMAN,—I had intended giving my views through the press, but will

avail myself of the opportunity which this meeting presents.

We are all agreed that the flooding is caused by ice dams. Now, can we in any way affect the ice so as to prevent it damming up? I think we can. I may say I agree in the main with the opinions of those gentlemen contained in the Witness, which appeared in the first article on this subject, but think too much stress was laid upon the frasil as being such a factor in causing the dams. My experience of running water has led me to the conclusion that it requires something solider than frasil to block a mighty stream like the St. Lawrence. I believe it is the solid masses of ice alone we have to deal with, and not with the frasil. I can understand after the dam is formed how the smaller pieces help to complete the work, but the small pieces would never form a dam, and if the larger pieces could be chopped up fine, there would be no damming and consequently no flooding. You may ask how all this chopping is to be done. I will tell you how, by building another bridge. I think it generally admitted that since the construction of the Victoria Bridge the ice floods have been few and far between.

Now if one bridge will have such effect what would not a second one have? In my opinion it-would chop the ice so fine that it would be impotent to create any dam. I am further strengthened in this opinion from what came under my observ-

ation and knowledge during the last high spring floods some ten years ago. The ice here—at Longueuil—was solid. The weather having been cold, it showed no signs of breaking up, but a different state of things prevailed up west and south; they had had warm thawy weather, causing sudden freshets and the breaking up of the rivers flowing into the St. Lawrence. Consequently the ice came down in solid masses, and finding the ice here unyielding, went underneath, doubtless grounded, and caused the flood. (While looking at the flood, a man from Beauharnois told me the ice had all come down from the rivers and lakes above the night before.) Now had there been another bridge, the ice coming in contact with this second set of abutments would have been broken up into such small pieces, that though being drawn underneath the solid ice, could not have caused a dam, and Montreal on that occasion would certainly have escaped a most disastrous flood.

This bridge should be located just below the Victoria, where it would in no way interfere with navigation. The other advantages to be derived apart from this, both to the city and country from a second bridge, are too well known to dwell upon at this time. I have already pointed them out in the press. Any money expended in this way would not be thrown away, but would bring in a good return from railway, carriage and passenger traffic. I would therefore suggest that, before money is expended in experimenting, another bridge be first built. I would not say that this would be a perfect remedy for the evil we are discussing, but it would greatly

ameliorate it by lessening the frequency of the floodings.

C. G. JONES.

Montreal, 1st April, 1884.

EVIDENCE OF MR. JOHN G. DINNING.

Remove Moffat's Island, Isle Ronde and the St. Helen's Island Shoals.

1. The current rushes towards it at the rate of twenty miles an hour carrying the ice against it. Driven therefrom, it is forced out into the channel, carried to the Ronde and jams there. Moffatt's Island removed and the space deepened, say to six feet, the ice would be carried against the upper end of St Helen's Island and the north side of the river behind the Island, thus disposing of the greater portion of the lake ice when it arrives.

2. Remove the shoals which exist from the upper to the lower part of St. Helen's Island, deepening the space to at least ten feet, thus leaving a wider channel for the

ice to pass down,

3. Remove Ile Ronde entirely, deepening the space to the extent of eighteen feet, continuing the same throughout the length of the bay of Longueui, thus providing a channel deep enough and broad enough for the free passage of the ice, thus freeing the city from inundation.

4. Should a jam occur at the Boucherville Islands, remove the small island on

the south side of the river, and deepen the space to eighteen feet.

Had Montreal been inhabited by Americans, St. Helen's Island would have been removed fifty years ago had it caused the flooding of the city. A disgraceful apathy has always existed in Lower Canada, while Ontario goes on leaving us a century behind.

The remedies proposed could by proper management, be effected by the employment of the many able-bodied men who are too lazy to work. These are to be found in hundreds in the Gaol and House of Industry.

The sand and stone removed from the river could be disposed of for building purposes, and for repairing the roads. The roads in Spain are repaired by convicts gnarded by soldiers.

JOHN G. DINNING.

Montreal, 29th March, 1834.

Note.—The above is a synopsis of the nine letters published in *The Star.*JOHN G. DINNING.

EVIDENCE OF Mr. JOHN GALBRAITH.

Erect Piers and Booms above Lachine Rapids.

Mr. John Galbraith said most of those who had already given their evidencebefore the committee, or through the press, had justly attributed the flood to a great extent to the formation of anchor ice, which is produced in great abundance in the rapids and open water above, choking up the more shallow parts of the river while the river is still low, and driving the main body of the water into the deeper channel, causing a shifting of the surface ice, that has by this time formed by the same severe cold that produced the anchor ice, and thus producing a new and greater difficulty, such as has existed all the past winter below our city.

Mr. Hodges, Contractor's Engineer for the building of the Victoria Bridge, published a book in 1861, being a description of his great work, and takes occasion to make the same remarks regarding the Montreal floods, and no man had a more lively appreciation of the difficulty, its course and extent. Such then being the

cause of our floods, they ought to prevent the production of anchor ice.

He said there was a great deal of misapprehension concerning anchor ice and how it is formed. He had seen a letter in the Gazette throwing ridicule upon the statement that there could be anchor ice.

In answer to a question about the widening and deepening of the channel below the city as a preventive, Mr. Galbraith expressed the belief that every effort in that direction would be of service, but the difficulty of getting a sufficient fall of water below the city would render these efforts comparatively valueless.

The person who wrote that article in the Gazette could not have been long a

resident of this country or he would have known better.

Anchor ice is formed mostly in the Lachine rapids and in the waters above them where the water was open, and appeared more like cart loads of sludge than solid ice. He had seen large cakes of ice rise from the bottom of the water. It only formed when the temperature was about 10 or 15 degrees below zero, and where

there was a rocky bottom; it would not form on wood or mud.

Anchor ice and frasil were entirely different; anchor ice formed at the bottom and frasil in the body of the water. Frasil is anchor ice, or, rather, ice in its inception form, but having failed to attach itself to a conductor by the rapidity of the water motion; snow falling into the water and being congealed under different conditions, then ice will sink in the water and add to the frasil floating there and help to produce the obstruction complained of. He attributed the formation of anchor ice to the water on the top becoming cold and falling to the bottom, where, if it met with some good conductor which would carry off its latent heat, it froze solid and only reappeared at the return of mild weather when it was liberated and came to the surface. The reason why there was so much anchor ice in the St. Lawrence he believed to be on account of the vast extent of open water in and for ten miles above the Lachine rapids affording sufficient time to effect a process of equalization of temperature down to the freezing point before reaching the cover below the rapids and thus becoming fastened to the rocky bottom, being helped much by the agitation of the rapids in becoming still more firmly rooted thereby.

If they could devise some means to provide a covering for the water and so prevent the heat from radiating, the anchor ice would not form. This, he thought, might be done by building an arc of piers, with booms thrown across in winter to facilitate the process of taking. The water would at once begin to freeze in winter at the sides and gradually extend back until the whole of the open water would be frozen over. The dam at Carillon had had this effect. The piers, he thought, should be built across the river about a mile above the first break of the Lachine rapids, care being taken to have them sufficiently close together to effect the closing of that part of the river, the piers thus forming the necessary shoulder to the ice-cover. For purposes of navigation, the centre space in mid-channel could be made wide enough for steamers to get through with safety. The barrier thus formed would keep the

upper ice sufficiently long in the spring of the year to give time for the ice in front of the city to undergo considerable liquefaction and less capable of resisting the upper ice when it should come down; and, in this way, would save us from the spring flood also. Lachine would suffer no inconvenience by it, but, on the contrary, would be greatly benefited by the ice bridge so formed.

Mr. Galbraith said also that the water issuing from under this proposed cover would retain a large portion of its natural heat and would reach the cover below the rapids without having parted with it to that degree necessary to produce anchor ice;

except in extremely cold weather, say 35 degrees below zero.

Mr. Baker said he agreed with Mr. Galbraith that where there is a covering to prevent radiation, nothing will freeze underneath. Thus, anchor ice would not form under surface ice. The St. Lawrence was one of the greatest factories of anchor ice in the world owing to the open water at the Lachine Rapids and Lake St. Louis.

Mr. Galbraith continued to say, that if the water below and above our city were less rapid and turbulent, so that a higher degree of temperature would suffice in effecting its close, the difficulty would not be so great. The most difficult thing was to start the formation of the ice for the covering, and this was the benefit of the beom. It would also serve to retain the upper ice until that below the city had a chance to break up.

JOHN GALBRAITH.

EVIDENCE OF MR. JOEL C. BAKER.

The Principal Obstruction at Boucherville.

Mr. J. C. Baker said that when a young man he was in the habit of going at Christmas and Easter by way of the river to his house in the county of Missisquoi, and therefore had frequent opportunities of watching the state of the river at these times and the changes it underwent. What caused the dam was the frozen ice and frasil that came down and caused an obstruction and made a very perfect dam.

These obstructions do not occur: generally in deep water but in shallow places; and they tend to scoop out a deep channel. The ice for a great many years has shoved down about as far as Boucherville, and by a chart the places where the obstructions took place could be very easily seen. The important feature was that we have a deep channel, and if we could have it wide as well as deep, it would serve to carry off the ice and frasil. The remedy, therefore, seemed to him to be the improvements to the ship channel, all of which he considered served to create a waterway for the ice. The ice shoves before the erection of the Victoria Bridge were much greater and more frequent. The only feasible remedy seemed to him to be to give all the room possible to allow this floating ice to get out of the way. The Lachine Rapids were one of the biggest manufactories of frasil in the world. This frasil must be carried down and cannot in any way be checked without checking the water at the same time. He had been convinced for many years that all the improvements undertaken by the Harbor Commissioners to the ship channel were in the direct interest of the city, as tending to remove the difficulty. Wherever they could widen, deepen and straighten the channel they would be doing much towards remedying the great difficulty.

Mr. Thomas Cramp asked if the main obstruction generally took place near the

same spot?

Yes; generally about the Boucherville Islands, but I have noticed obstructions at other places, especially about Moffatt's Island and at other places above the harbor. But the great difficulty has been below the harbor, and the other obstructions were only secondary.

Mr. Cramp:—Then the obstruction at Boucherville Islands is the real point?

That is my opinion. You have got to go there to get to the root of the evil, and

by this way only will the difficulty be remedied.

Mr. Cramp:—Have you paid any attention to the matter this year? Well, I have been over a considerable portion of the ground this year.

Mr. Cramp:—Is the phenomenon about the same this year as in past years? There can be no doubt that it is.

Mr. Cramp:—You then attribute the immunity we have enjoyed for many years

from floods to the improvements to the ship channel?

Yes, I certainly do, and think that these can be the only remedy for the difficulty in the future.

The Chairman: - Does the frasil form every year or only in certain years?

It forms every year more or less.

Mr. Cramp: - The most serious enemy is therefore the frasil?

Mr. Baker :- Yes, I think so.

Mr. Cramp: Do you think that if by any artificial means the ice could be

detained in its course a passage could be obtained for the frasil?

The ice itself would not make a close dam, but the frasil is also carried in by the water and makes a perfectly impervious dam. The frasil without broken ice would, I think be carried down, as it has not substance enough to remain and form a dam.

Mr. Cramp: - How long have you been paying attention to this subject?

I commenced my observations first in 1849. My observations have been of a personal nature. I have written several letters to the public on the subject, and my opinion on the matter of floating ice and frasil are entirely my own, derived from personal observation. I have copies of the letters in question, and am willing to submit them to your committee for consideration.

J. C. BAKER.

EVIDENCE OF MR. JAMES SHEARER.

Clear the Channel south of St. Helen's Island of all obstructions.

Mr. James Shearer thought the surface ice had more to do with the flood than the frasil. The late flood was a more peculiar one. We had a very cold fall with ne snow for a time, and the ice, of course, formed very thick, for it was a well known fact that the formation of ice was much slower when the snow lay thick on the ground. Then came a strong south-west wind which lasted for several days and broke up the surface ice, sending down the solid green blocks, which blocked up the south channel completely and the north one partially.

Then a jam formed at Boucherville of these blocks, the frasil filling up the interstices. But the jam was not here altogether, for while the water rose twenty-one feet four inches at the foot of the canal, it only rose twelve feet at Longueuil. If the jam was wholly at Boucherville, Longueuil should be submerged to the depth of

about eight feet.

The cause of this was the south channel being completely blocked with ice and the whole of the water having to pass by the north channel. The south channel was full of islands and boulders, and the ice being obstructed thereby, piled up on it to the height of fifteen feet, in blocks of one foot in thickness. He considered the only cure was to clear out the south channel of all obstructions, and when the river rose as it did this spring, the water would have a channel 2,800 feet in width and six feet in depth to pass through. They should not deepen the channel, as that would lower the water opposite the city.

This plan would not affect the navigation, as in summer the south channel would be as shallow as ever. The wharf at St. Lambert should be done away with, as it lay directly in the current. The long wharf should also be removed for a similar reason, but they should not touch He Ronde, otherwise they would lower the water in the

harbor.

The ship channel should be widened and deepened, the debris taken out being placed at the sides of the river so as to keep up the level. There was deep water round the back of St. Helen's Island with only one shoal of about 2,000 feet in length, and if this was removed they would have a steamboat channel there. The jurisdiction of the Harbor Commissioners only extended to the middle of the river so that they have never interfered beyond it.

EVIDENCE OF MR. T. B. DE GROSBOIS.

Clear the course from Longueuil to Boucherville.

CHARLES GLACKMEYER, Esq., City Clerk of Montreal:

SIR,—The Mayor of Boucherville having requested me to answer your letter, asking information on the subject of the inundations, I take the liberty to make known to you my observations concerning the inundations. Having always lived on L'Ile St. Joseph, at Boucherville, it has been easy for me to observe the inundations.

Inundation years at Boucherville.

The first took place in January, 1860, the second in April, 1862, the third in 1865, the fourth in 1868, the fifth in 1870, the sixth in 1872.

Since that year we have had no great inundation; the water rose occasionally,

but no jam seems to have formed, and the water caused little damage.

The greatest inundation took place from the 23rd to the 25th of April, 1862, and

the water rose at least 20 inches higher than at any previous time.

In the month of December, 1883, and in January of that winter, the water rose a little, but a jam having formed near Longue Point, the water subsided here, and when the water was very high at Montreal, it was relatively low here.

Cause of Inundations at Boucherville.

The inundations at Boucherville are caused by the piling up of ice on the lower portion of the Island of Varennes, and the battures of the Pointe aux Trembles. This is demonstrated by the strength of the current which there throws itself into that part of the river to the south of the Islands of Boucherville, and which I will call the Boucherville River. On the 23rd of April, 1862, the water rushed on with such a force towards the Boucherville River that canoes could hardly be used; the same thing happened in 1872. The batture situated on the Boucherville River, on the lower portion of the Ile St. Joseph, caused a small jam in 1870, and a commencement of the same last autumn.

Cause of Inundations at Montreal.

The inundations at Montreal are caused by the piling up of the ice in the battures of Longue Pointe and the Islands of Longueuil. I will remark that the parish of Boucheville ends at the Moison channel, and that the islands situated

higher up than the channel are in Longueuil parish.

The river forms at this place a cul-de-sac, which has no outlet but the ship channel near Longue Pointe. It was not enough, it appears, that this vicious conformation of the river caused damage to Montreal, the Harbor Commissioners had the earth removed by the dredge dumped all along the Longueuil Islands, so as to form a batture and almost block the Boucherville River at its mouth. All the rubbish from the holds of vessels coming into port and the sweepings of the port were thrown into the same place last summer, poisoning the Boucherville River. Several complaints were made and with very little results.

Another fact to show how little care was taken against obstructing the river. During the summer of 1882, the Government had the channel deepened between Boueherville and Longue Pointe. The earth was thrown on each side of the channel. I do not know if it was thus thrown throughout the whole length of the cut, but in several places it is exposed at low water. Imagine a shoal about thirteen arpents long almost across the width of the river. Last summer the ferry boat got aground during a storm; it had just been got afloat when it again struck on the

buttes formed by the dredges.

When we examine this year's jam, we see that it is very close to this bar.

The dredges which excavated the channel in the battures of Pointe aux Trembles and at the head of the Ste. Therese, also threw the earth into the river in places dangerous for the ice; it was even thrown into a pretty deep channel opposite the

north side of the Ile à Cardinal or Ile à Dufaulx. This earth should always be

thrown at the end of an island, and never at the side.

The slope of the river between the battures of Longue Pointe and those of Pointe aux Trembles being inconsiderable, I am pursuaded that a jam formed on the battures of Pointe aux. Trembles and the lower portion of the Islands of Varennes would cause an inundation in Montreal if the Boucherville River was obstructed as it is this year. But when there is no jam in this river the water escapes that way, and this is what explains how it is that there has not always been an inundation in Montreal when there was one here.

This Year's Jam.

The jam which exists to-day was caused by a shoving of the ice, composed largely of snow ice. It took place on the 27th of December in the night. The ice descended St. Mary's current and piled up on the batture of Longue Pointe and the

Islands of Longueuil.

The Boucherville River was blockaded between the Longueuil Islands, and was free from ice until the lower portions of Ile St. Joseph. This blockade was not a jam; it occurs at this spot nearly every autumn. The people here called it la barrure. It consists of a bank of ice too great for the entrance of the river and which remains there; it is only a few inches thick. During the shove, a portion of this block came down the Boucherville River, and stopped at the foot of the village, forming on its passage enormous jams. At present the Boucherville River is half blocked by jams. The other portion of the block stopped at the small Islands of Longueuil and on the batture formed by the Harbor Commissioners, making a jam which extends from the property of Mr. Damase Charron, on the Island, till near the property of Mr. J. M. Browning, on the Longueuil shore.

A portion only of the entrance to the Boucherville River is free from ice. The snow now hides a part of it, and this explains Mr. Nelson only mentioning one portion of it, that to the west of Mr. Charron's farm. That part which extends to the

Longueuil hill was easily visible at the beginning of January.

The ice did not move during the shove below the jam on the Pointe aux Trembles side. At this place the ice was formed of water without snow. I noticed that the snow ice is more dangerous for jamming than the green ice.

Means of Preventing Inundation.

I do not think there are any absolute means of preventing inundations, but some may be of great assistance. Those I will take the liberty to suggest will, I think, be advantageous to Montreal and its environs.

I will mention three:

First means.—To prevent anyone whatever from throwing earth into the river in places dangerous for ice. The earth excavated in the port should be thrown at the upper part of the small Islands of Longueuil, and not on the west side, so as to lengthen the Island and not to widen it

The earth from the battures of Pointe aux-Trembles should be dumped at the

lower end of the first Islands of Varennes.

The channel between Boucherville and Longue Pointe should also be examined next spring, and if the earth has been dumped all along the shores as it is in certain

parts, it should be removed without delay.

Second means.—It would be necessary to deepen the river on the Boucherville side, i.e., at the two extremities of the Islands of Longueuil and St. Joseph, near the properties of Messrs. Damase Charron and G. Deschambault. If a jam should occur on the battures of Longue Pointe or Pointe aux Trembles the water would escape by the Boucherville River, which empties itself lower than the battures of Pointe aux Trembles.

Somebody has suggested excavating the batture of Longue Pointe. But let us suppose that the jam between the islands and Longue Pointe should be on the battures

of Pointe aux Trembles, the Boucherville being obstructed as it is now, the water could not escape by Boucherville and the result would be the same for Montreal.

Let us remark that it would only be necessary to deepen the two extremities of

the Boucherville River, because elsewhere the water is deep.

Third meens.—This would be principally in view of preventing inundations in the autumn—those which cause the most damage. It would not cost much. It would consist in forming two or three small islands, a few hundred yards of earth dumped on the lower portion of Ile St. Joseph on the Boucherville side.

The reason is this: From the first frosts of December, the river carries ice towards Boucherville, but the mouth of the river in the Islands of Longueuil being narrow, the ice immediately piles up leaving the rest of the Boucherville River free from ice. When the ice a cends St. Mary's current, it shoves and breaks down this barrier, which then piles up on the islands of Longueuil and causes a jam on that side. See what happened last autumn. This blockade caused the jam in the Boucherville River. All the residents of the islands feared the descent of the blockade. This

is always a cause of trouble in the river.

The small islets I should wish to see formed would have the effect of stopping the first ice in the autumn, and good ice would form on the whole Boucherville river from the lower portion of Ile St. Joseph to St. Helen's Island and this on the first frosts. This portion of the river would be strong enough to resist the shove, which would only be felt along the shore, as was shown by experience for several years, and it would be a surety that no jam would form from the north east portion of St. Helen's Island to Varennes, on the Boucherville side. Let us suppose that a jam were to form on the battures of Longue Pointe or Pointe aux Trembles; a third of the river at least would be free and would give passage to the water.

I remember three years when the ice had shoved opposite my property in Ile St. Joseph and Boucherville Village. The shove was considerable, and nevertheless it was only felt a little on the shores of the Boucherville River. When all the Boucherville River is covered with good ice as far as St. Helen's Island nothing will be able to break this large extent of ice, and there will always be a free passage to allow the

water to pass on the Boucherville side.

These islets would require to be small and low so as not to stop the ice in the spring. They should be built up on the rock mentioned above. The river is shallow at this place. It would be outside of the ship channel, and would in no wise obstruct navigation. The earth taken from the ship channel might be used for this purpose.

The Cost of these Works.

The first means suggested would only cost the good will of the harbor engineer.

The third means would cost little. It would be sufficient to dump a few barge

loads of earth on spots selected beforehand.

Lastly, the second means, the excavation of the entrance and outlet of the Boucherville River would cost something, it is true; but I do not think it would cost more than the excavation of the batture of Longue Pointe.

Resumé.

I believe the inundations at Montreal and vicinity to be caused by the ice jamming on the battures of Longue Pointe and the Longueuil Islands, and on the battures of Pointe aux Trembles and the first island of Varennes. These jams are caused by the shoving of the ice which descends the St. Mary's current, and which is the principal cause of all the inundations.

And that the means of preventing them would be:

1st. To prevent the obstruction of the bed of the river by the earth excavated by the dredges;

2nd. To deepen the two extremities of the Boucherville River;

3rd. To form two or three small islets between Ile St. Joseph and the lower portion of the parish of Boucherville.

In terminating I must say I am greatly interested in seeing the end of these inundations, as all my property is situated in the Boucherville islands.

If your committee wishes for more ample information from me, I will have great

pleasure to be at your service.

I have the honor to be your humble servant, T. B. DE GROSBOIS.

BOUCHERVILLE, 15th February, 1884.

EVIDENCE OF ALDERMAN MOUNT.

Blaming the Clerk of the Weather.

Alderman Mount said he desired to explain his theory of the inundation of 1884. For about fourteen years he had been living at the foot of the current, and was in a position to notice the phenomena attending the river floods. He considered that the inundation had been caused by the manner in which the ice had formed this winter, which was quite different from other years. This winter the ice took first early in December, then eight or ten days' thaw ensued, when it was sometimes above and sometimes below freezing point. The ice then shoved down as far as Longue Pointe on to the shoals, and remained until it took a second time. During the mild weather, however, the snow or frasil packed and formed a barrier, which he considered was the cause of the inundation. About the 4th or 5th of January there was severe weather again, but the ice was not sufficiently strong to break up the barrier which had formed, and which was, in his opinion, the cause of the flood. Until the ice has reached what we call "les trois roches" it is said not to be firm; when the ice is strong it remains firm, and there cannot be any shove.

J. W. MOUNT, M.D.

PERCIVAL W. St. GEORGE.

EVIDENCE OF MR. P. W. St. GEORGE, CITY SURVEYOR.

Recommending Scientific Investigation.

Mr. P. W. St. George, city surveyor, said that the plan submitted by Mr. Brittain showing the level of the water in the river at the different dates, shows that on the 3rd January the water had risen four feet, and that there was no dam between this city and Longue Point. It was mentioned in the papers that Longueuil was not affected by the rise; but this was not so, as the water in Longueuil was at the same height as on the Hochelaga shore.

This year Mr. J. M. Nelson, assistant engineer of the Harbor Commissioners, has taken surveys and prepared plans from which valuable information could be had,

and he would ask that these plans be submitted to the committee.

He would also recommend that engineers be appointed by the Government to investigate this ice phenomenon for a number of years as one could not form an opinion on one year's experience.

EVIDENCE OF MR. ALFRED BRITTAIN, ASSISTANT CITY SURVEYOR.

River Levels and the Water.

In 1869, I examined into the facts in connection with the rising of the river opposite the city in the months of January and April, with a view of determining the best location for the outfall of the city sewerage. It being an accepted fact that the rise of water in the harbor was caused by ice obstructions opposite or below the city, I confined my observations to this side of the river, and between Victoria Bridge and Longue Point.

The only records which I found available were: 1st. A report of the Royal Engineers in 1841, on the periodical flooding of Montreal. 2nd. The gauging of the

water on the lock sill at the entrance of the Lachine Canal. 3rd. Levels taken from Jacques Cartier Square to Handyside Creek, on the previous April, by Mr. Joseph Smith, who was at that time Deputy City Surveyor. I also saw several persons whose names were given me by Mr. Macquisten as being likely to have made useful observations on the subject.

The report of the Royal Engineers shows that these floods always existed, more or less, during January and April, and that their frequency and extent is less now than formerly. Plans also must have accompanied this report, but I found no traces of them; they would be of little service, as owing to the changes in the city since

they were made their designs would be impracticable at the present date.

The daily record of the height of water at the entrance of the Lachine Canal affords no means of determining whether the height of water recorded was caused by the ice grounding opposite that portion of the city or lower down the river.

The levels taken by Mr. Smith in 1869, extending from Jacques Cartier Square to Longue Point, permit a profile of the surface of the river during flood to be made between those points, and was the only available record up to that date which showed the relative height of the river during flood; they give a fall of 4:33 between Ruisseau Migeon and Handyside Creek, and clearly show that a large jam of ice existed between those points. The flood water in the harbor was unusually high that spring,

being two feet above the revetment wall at Jacques Cartier Square.

I took a series of levels during the winter of 1870; they are shown on the accompanying diagram. The first was taken on the 11th January when the water was at it highest point during that season, being one foot below the revetment wall, with a fall from thence to Longueuil ferry of 4:30; and from thence to Longue After remaining a few days at about that elevation the water Point Church of 8.30. went down, and the next rise took place in April. An examination of the accompanying diagram shows that a considerable change in the proportion of fall at the points of observation between Jacques Cartier Square and Longue Point took place; and that during the interval between January and April, obstructions had formed on the shoals in the neighborhood of Longue Point and from thence upwards. It also shows that the grounding of the ice on these lower shoals raised the water there several feet in height without causing a corresponding rise of water opposite the city, for on the 10th of April the water was within two feet of the top of the revetment wall and remained at the same height at that place until the 12th. During this interval of time great quantities of drift ice came down from Laprairie basin and by choking the channel raised the water about two feet, between Hochelaga and Longue Pointe, without making any change in its height opposite Jacques Cartier wharf.

From levels taken during this winter it appears that the fall of the water between Jacques Cartier Square and Longueuil Ferry varies from 2.00 to 2.4. If the rise of water opposite the city was caused by the accumulations of ice on the shoals lower down the river it would be shown by a corresponding reduction of the fall between these points, or in other words the rapid would be drowned out; but the diagram shows that such is not the case, because when the water is at its highest opposite Jacques Cartier Square there is an increased fall from thence to Longueuil Ferry.

I took corresponding levels in the succeeding year, 1871, they are recorded on the diagram in a similar manner to those taken in 1870 and confirm the conclusions

arrived at from the levels taken the previous year.

The diagram submitted by the City Surveyor, Mr. St. George, shows in different colors the flood lines in 1869, 1870, 1871, 1883 and 1884; the January floods are shown by a firm line, and the April floods by a dotted line. In every case these lines show that the height of the water between Hochelaga and Longue Pointe is raised in the spring by the accumulation of ice between these points; without causing a corresponding rise of water opposite the city. This is very marked in the flood lines of 1870 and 1871.

Although I found no record of instrumental levels taken previous to 1869, the evidence of residents on the river bank demonstrated that in some cases an extensive dam had formed below Boucherville causing the village to be flooded. The levels

taken in 1867 clearly show a dam formed between Ruisseau Migeon and Handyside

Creek and the village of Longueuil was flooded by it.

The levels taken in 1870 and 1871 show the ice grounded all along the shoals from Longue Pointe to Hochelaga, but no special dam was formed. This year the levels taken by Mr. Nelson, assistant harbor engineer, clearly show that the principal dam is just below Longue Pointe Church.

From the above records it appears that the location of the ice dams is not uniform and that in some cases no special dam is formed between Boucherville and Hochelaga, although the ice always accumulates during the winter months on the shoals between these points and causes the water to rise there without causing a

corresponding rise of water opposite the city.

The average fall of the river is less affected between Jacques Cartier wharf and Longueuil ferry than at any other part of the channel, as the depth and rapidity of the current between those points keep it free from drift ice and frasil. If the floods opposite the city were caused by the dams of ice below Hochelaga, St. Mary's current would be drowned out, but the levels taken show that it is not the case and that during floods the fall of water is greater in that current than during ordinary circumstances.

The evidence uniformly goes to demonstrate that the rise of water opposite the city is caused by a dam being formed on the shoals below the Victoria Bridge on the south side of the river. The old Grand Trunk wharf and Moffatt's Island form the nucleus of the dam, and it is rendered solid by the drift ice and frasil. That this wharf is a serious obstruction and diverts a large quantity of water into the north channel that would otherwise pass down the south channel there is little doubt. At ordinary summer level the water is from a foot to eighteen inches higher on the up side of the wharf than upon the down side, and during winter this becomes a solid dam and almost the whole volume of water, increased by frasil and drift ice, has to pass St. Helen's Island by the north channel.

That extensive ice dams occur above Moffatt's Island and raise the water opposite the entrance of the Lachine Canal is also shown by levels taken during the last two years to locate the position of an outfall sewer for Point St. Charles. These levels show that the fall of the river, from one hundred yards above Victoria Bridge to the

entrance of the Lachine Canal is as follows, viz.:

When the river is at summer level the fall between these points is 8.0. When the river is at flood level the fall between these points is 2.03".

These figures show that the natural fall of the water between these points is drowned out by the accumulation of drift ice and frasil, in precisely the same manner that it occurs between Longue Pointe and Hochelaga.

ALFRED BRITTAIN.

MONTREAL, 27th March, 1884.

EVIDENCE OF MR. LOUIS LESAGE, SUPERINTENDENT MONTREAL WATER WORKS.

High Water Levels from 1853 to 1884.

Mr. Louis Lesage, Superintendent Montreal Water Works, had no plans to propose, but could make suggestions. He submitted a tabular statement of the high water levels from 1853 to 1884, taken at lower entrance of Lock No. 1, Lachine Canal.

The table showed twelve winter floods, of which seven were followed by spring floods, and one was yet uncertain. Of ten spring floods only three were not preceded by winter floods.

He further said that the obstruction in the channel was generally caused by the large quantity of ice shoving down on the shores of Longue Pointe and Varennes.

Height of water above datum (M. W. W.) at lower entrance of Lock No. 1, Lachine Canal, at flood times:

Year.	Harbor Closed.	December.	January.	March.	April.	Harbor Opened.
.853 ,	Dec.	-0.2	16.3		4000010 -	April
1854	6 3 12	-1.1 -0.10	18·9 20·6 19·3	*******	17·9 17·6	25 24 9
1858	11 22	1.0	17·5 17·4	17.5	22.7	24 24 23
1862 1863 1863 1864	12 11	-0.4 -0.3	17.6		16·5 17·9	23 25 13
1865	16 6	-2·4 -2·5	17·10 18·8		21.9	10 22
1869	18 Nov.	-0·6 -1·4	17.6		21·5 17·6	25 18
1873	26	16.10	19.0		19.6	25

This went up to 21.7.

Top of revetment wall at Jacques Cartier Square is 19.6.

The above table shows twelve winter floods of which seven were followed by spring floods and one is yet uncertain. It shows ten spring floods only three of which were not preceded by winter floods.

LOUIS LESAGE, Superintendent of Water Works.

EVIDENCE OF MR. LEGER, PILOT.

Build two Rows of Piers above Lachine Rapids.

Material, plates, No. 24, 6 feet long, 4 feet wide, by $\frac{2}{3}$ thick, would cost \$147. Making and fitting on plates would cost \$147. Would require 250 pourds of $\frac{1}{2}$ inch rag bolts 6 inches long, to secure the plates, which would cost 7c. per lb., which would make the sum of \$17.50, which would form total of \$311.00.

Estimation of Cost of Piers.

6 piers, 100 feet square, 15 feet high, requiring 13,000 feet each of flat and square hemlock, 78,000 feet at 10c.	
per foot\$	
640 toises stone per pier, 3,840 toises at \$6	25,040 3 120
<u> </u>	33 960

Mr. Michel Leger, one of the pilots of the upper lakes, was examined, and displayed a plan to the committee. His opinion was that floods could be obviated by the erection of piers and booms at outlets of the lakes, especially at the outlet of Lake St. Louis, which would stop the ice in its course and leave a passage for the frasil.

CHARLES X LEGER,

Mr. Michel Leger continued his information to the committee. As he thought that the plan which he submitted at the last meeting was not fully comprehensible he would give further details about it. In Lake St. Francis the ice generally broke up about fifteen days after that at Montreal. The consequent shove caused a dam below the city, which was quite impervious. He proposed the construction of two rows of piers or booms, one from Ile Dorval to St. Nicholas, and another just above the Lachine Rapids. In reply to a question by the chairman, he said he had not prepared an estimation of the cost of such construction, but would do so for the next meeting.

CHARLES X LEGER,

Witness-A. Gosselin.

EVIDENCE OF MR. G. H. HENSHAW, CIVIL ENGINEER.

Widen the ship channel at Longue Pointe, open a new channel at Boucherville and clear the channel south of St. Helen's Island.

Mr. Henshaw said that he had always been proud of Montreal, and always tried to do some good to it. He had always had the idea that something might be done towards making the harbor of Montreal a winter port. His opinion was that we could have a harbor in which vessels could be protected from ice. He had had a good deal of information, and he thought that a great deal of credit was due to the city of Montreal for ascertaining certain facts in this matter, and he hoped that the theory which he would presently give would accord with the facts that had been brought up by our engineers.

One of the most important pieces of evidence, which he had heard so far, was that of Mr. de Grosbois, which did certainly reflect much credit on that gentleman,

and he agreed with him in what he had said.

MONTREAL, 24th January, 1884.

Geologists tell us that the valley of the St. Lawrence, in fact the great interior of the continent was in past ages a great basin which has been by turns repeatedly depressed and elevated, the successive stratifications at present existing therein, being deposited during each submergence, from material eroded from its shores and highlands. This erosion, speaking in general terms, produced in the course of the last of these changes the alluvial soil which at this moment covers the valley of the river,

and through which it has cut its present course.

Referring to the particular part of the river which at present demands our attention, that is, between the Lachine rapids and the foot of the Island of Montreal, you will perceive that as the river excavated its bed and shrank to within its present shores, numerous islands came into existence. These islands were formed by the presence of obstructions which made it easier for the stream to cut its way on both sides of them than to carry them off, that is to say, the river followed what is called the law of least resistance, according to which the stream first divided at the head, and then became again united at the foot as soon as that law permitted. Here, at the heads of Heron and Nun's Islands you can see the groups of boulders which remain of the original barrier which produced these islands, also the small island and ledges above St. Helen's, &c.

Looking at the conformation of this part of the river there can be little doubt that before the shore line took its present shape, its main channel ran in a direction more conformable with its general sweep than it now does; thus, with its north shore about the same as at present, it flowed at a comparatively even width throughout, its main body taking the south or rather east channel at St. Helen's Island until it reached Longue Pointe, then not so defined, but more rounded like Pointe aux Trembles, below which there appears little reason for supposing any material change. The north channel at St. Helen's Island would be small, and very likely at first discharged nearly all its waters through the passage between St. Helen's and Ile Ronde.

At this period all the islands now seen, and perhaps more, were in existence, and beyond some reduction in size from wearing away by the stream, present the same appearance to day, except in one very notable instance to which I shall pre-

sently refer.

As the river continued to cut its way, always choosing the softest places consistent with the correlation of its forces, it began gradually to excavate here, on the outer side of its curve, the Laprairie bay, and as a consequence of the change of curves so produced, began to hollow out the north or west channel, known as the St. Mary's current, as well as the bays now composing the harbors of Montreal and Hochelaga, a process much aided by the bars of rock which impeded the natural deepening of the other channel; the absence of which indeed might have prevented the formation of the north channel at all. Thus we see that this new curve, worn along the Hochelaga shore, is really what has made what we call "Longue Pointe," this being the place where the two currents running side by side fairly resume a united course.

Now I wish to draw your attention to the remarkably exceptional character of one group among all these islands, to which I have alluded, namely the Boucherville

Islands.

If you have attentively followed, and admit my reasoning so far, I think you will also agree with me in considering that, originally, these islands were united as one, having the same general oval form as all the rest, and that as the north channel began to monopolize the volume of the river and rushed to its junction with the other off Longue Pointe, the latter was thrust more upon this island, forming first a bay and finally a channel separating one part from the other. This channel, on account of its current being reduced in speed, would, at its lower end, separate into several small passages forming all these small islands. You see they all partake of the same general form with the rest. But this is not all. You perceive that the main island is traversed by several small channels or rivulets absolutely at right angles with the course of the river, dividing it up into pieces, much as a cook would divide a long fish for frying; and here I think in these apparently insignificant water ways we will find the solution of the main difficulty, if not of the whole question.

Between these islands and the south shore there is a narrow channel navigable to vessels of small draught, the whole lying well out of the line of the main current of the river. Now surely it might be expected that these narrow passages, and even the channel along the shore, lying as they do in a sort of eddy would silt up; and yet there is no tradition that I know of, of their ever having been different from what they now are. The names of the islands have existed from very early times, and though the passages have been long encumbered with grass and sedge they have never been closed. It is therefore to the condition of their formation that we must look, to explain their preservation; and to do this we will first look briefly at

another question, namely, the formation of what is called fracil ice.

This question, upon which a great deal has been said and written, I would like very much to take up at length, but at present it would take us too far from our subject. I will therefore only say that what I have every reason to believe is the true theory, one which I may be pardoned for looking upon with some satisfaction

as being my own, is this, as applied to this special locality:—

In very cold weather the water passing down the Lachine Rapids, becomes practically reduced in temperature below freezing point, and passing beneath the slower moving waters at their foot, quickly refrigerates the stones and boulders spread over the bottom of the great area below, converting it into a veritable nursery for the production of frasil ice. There is plenty of evidence of this latter fact, which I will not now stay to give. The frasil thus formed is continually being broken off in small quantities and floated down, but when a sudden thaw occurs, it detaches itself in large masses like heaps of gigantic icy bars, and floats down until it finds a place shallow enough to hold it between the under surface of the ice and the bottom, where it stays and is packed in, and extended by succeeding masses, until the water way is so narrowed as to cause a more or less sudden rise of water.

The fluctuations or partial fails, that follow rises, are due to the breaking away of

parts of these dams when lifted by the rise.

Thus we may fairly assume that frasil ice is the immediate cause of the rise of the river in winter, for it is only in the breaking up of the river in spring that masses of ice at all capable of blocking such a channel are on the move. This choking of the river by frasil ice is of yearly occurrence, for there is always more or less of rise, therefore it is only when the conditions are most favorable for the production of this substance that a flood occurs. Again, so long as the normal course of the atream is not interfered with, there will be little difference of locality in the deposit, but only of quantity. One other fact, we are apt to lose sight of, must be borne steadily in mind, and that is, that the volume of the river in winter, except in heavy thaws, scarcely ever surpasses that of low water in summer. This is important to remember because it is this lowness of the water which narrows the space between the surface ice and the bottom. Hence the lower the water at the beginning the more rapid and extensive is the formation of the dam, if all other conditions are the same.

Bearing all this in mind, let us see what course the frasil ice once in motion will take. The south channel being shallow and obstructed would attract but little and the mass would be carried by the current directly down against the city, and, depositing its quota among the wharves, it would sweep along the Hochelaga shore towards Longue Pointe. A small portion would be attracted by the current between St. Helen's Island and He Ronde, but the proportion of this would be so small, that the removal of this latter island, so strongly advocated by some, would not probably make a noticeable difference. Arrived at Longue Pointe it would shoot out a talus in the direction of the shoal at that place, across the main channel, and towards the opening in the Boucherville Islands. Immediately the river would begin to rise, in proportion to the obstruction formed, until the force of the current became sufficient to break off or deflect the end of the talus and carry away the surplus frasil, to lodge among the islands below.

The river by this time has risen enough to enable a considerable quantity of frasil from above to descend the south channel, following of course its deepest part, and obstructing the shoal in front of Longueuil, until opposite Longue Pointe, it is thrust aside by the main northern current and fills up the channel or cul-de-sac between the Boucherville Islands, practically confining the whole volume of the river

to the present ship channel.

And now we come to the explanation of these small lateral passages which so curiously divide the Boucherville Islands. The confined water of the main channel rises considerably higher than that of the narrow channel along the south shore, and hence in escaping beneath the ice, these little channels have been cut. Thus these channels are winter torn and are not silted up in the summer because every winter they are washed out by the same agency that originally produced them.

This then is my theory of the cause of the winter floods which affect the city of Montreal, based upon my investigations into the character of frasilice and its effects; and I pretty confidently expect that the result of the examinations undertaken by the city and harbor engineers, now in progress, will confirm it in every important

point.

The Remedy.

Assuming my theory to be correct, I would confidently recommend:

1st. Widening the ship channel at Longue Pointe by cutting the flanking shoal entirely away, close up to the shore, and so straightening as well as widening the channel.

2nd. The conversion of the cul-de-sac in the Boucherville Islands into a channel

of relief, by giving an exit below.

3rd. Removing Moffat's Island and clearing the south channel of all large boulders and projecting rock ledges

All this would not, of course, prevent the formation of frasil ice, but it willremove it to a safe distance; and for the same reason, very largely diminish chances of ice jams in the spring, if not entirely remove them.

It would be as idle to attempt the entire prevention of rises in the river as to do away with the ebb and flow of the tide; but we may reasonably expect to be able

to keep these rises from becoming floods.

I would add in reference to my third recommendation, that the excavation of the south channel at St. Helen's Island to a depth sufficient for the river traffic in the summer, would be still more effective, and I confidently predict that this will some day be done, but unless it is made part of a more comprehensive scheme of harbor improvement, it is not to be recommended, since, by itself, it would have the effect of lowering the harbor level during the dry summer season, which also means a reduction of depth upon the lower sill of the canal lock.

GEORGE H. HENSHAW, C.E.

EVIDENCE OF MR. JOHN KENNEDY, HARBOR ENGINEER.

Mr. John Kennedy, Chief Engineer of the Harbor Commissioners, produced a number of charts and maps showing accumulations of ice at various points in the

channel, depth and width, taken at times of flood.

He explained that the flood of last fall at Montreal was caused by a general diminution of the capacity of the channel from the Victoria Bridge to below Longue Pointe and not by an ice jam forming a dam at any definite point. during the flood show only about a foot of backing up of the river at the large ice jam at Longue Pointe, but from that to the bridge there was a gradual increase of the surface inclination to an average of about 20 inches per mile, as against 6 inches per mile in summer. A coating of freeli ice on the bottom and accumulations under the surface ice might easily increase the surface slope of the water, say an inch per mile, and even this little increase extended for miles would have a very marked effect on the water level. Add to this solid accumulations or jams at various points, still further reducing the channel and increasing the slope, and floods are easily accounted for at Montreal.

Floods occur at many points between Cornwall and Quebec, as well as at Montreal; at Cape la Roche, for instance, the water rises in such a way as sometimes to flood Batiscan. Three Rivers is also flooded every five years. Ice jams are frequent at Cornwall, and the water powers of the large factories and mills there are sometimes drowned out all winter. From these facts it may be gathered that the ice accumulates every place where a rapid current changes to a slow one, and that it often jams in such a way as to increase the hydraulic inclination more or less abruptly,

and thereby causes a flood.

In the case of Montreal it is well known that the ice "takes" first at the Boucherville Islands, and the river from that to Lachine is open much later. If the frost is very severe during that time, floating ice and frasil are formed very fast in the open water of the Lachine Rapids and Laprairie Basin, and those are floated down to the stationary ice till the whole harbor is not only covered with packed ice, but immense quantities are carried under until the area of the channel is greatly The combined effect of the friction of the surface ice and the choking up of the channel beneath is to increase the surface slope of the river, from about the Boucherville Islands to the city, to a greater or less extent, and in some years to such extent as to flood the lower streets. The recorded levels and careful observations are few and incomplete, but so far as they go, they show that floods are due to this gradual rise over a considerable distance, and not to the ice jams which appear so formidable upon the surface.

In 1862, at the time of the flood, levels of the water in the river were taken by the Road Department which he thought were still on record in the Road Department.

He was of opinion that finasil forms everywhere in open water and extreme cold weather, whether the water be in rapid motion or otherwise. He is not aware of 26 any remedial measures yet proposed which could be relied upon to prevent floods. The dredging hitherto done had made only an insignificant ditch in the bed of the river as compared with its whole encrmous volume. There are no local obstructions in the river at Montreal by the removal of which we could hope to entirely relieve Montreal.

The building of piers at the foot of Lakes St. Francis and St. Louis might do

some good, but would not affect the general question.

Mr. John Kennedy, harbor engineer, continued his evidence as to the nature and extent of the several inundations which had occurred during the last twenty years, and although not now prepared to offer any suggestions for the prevention of floods in future, was of opinion that they could be at least mitigated. The information as to the important facts and conditions which accompany floods are so meagre and fragmentary that it would be unwise to base a scheme of prevention upon it. He strongly advocated a comprehensive series of observations and survey of the river from Varennes to Lake St. Louis, for the purpose of obtaining full and accurate information as to all the facts accompanying floods. This could only be done at considerable expense, but it is the first essential step towards dealing with this important question.

Mr. Kennedy in reply to a question of the Chairman said he thought that if the main channel about the Boucherville Islands were widened and straightened it would be better, or at least in the right direction. He could not say what this would cost without further surveys. The probable cost of making the surveys between the city and the Boucherville Islands would be about \$500, after which the cost of widening

and deepening the channel could be very easily determined.

Mr. Cramp asked how long it would take to make a survey; to which Mr. Kennedy replied that in summer a survey could be made in about a month's time.

In reply to a question by Mr. Jones, Mr. Kennedy said some of the pieces of ice which pass through the harbor are very large and some very small. Some of the pieces were so large that it was puzzling to know how they could pass under the Victoria Bridge. He did not think that the construction of another bridge would do any real good towards protecting the city from floods.

JOHN KENNEDY.

MONTREAL, 3rd April, 1884.

To the Chairman of the Flood Committee.

DEAR SIR,—I desire to record the following remarks in reply to the opinions expressed by the harbor engineer at your meeting on Tuesday last, which the laterage of the hour prevented my making on that occasion

ness of the hour prevented my making on that occasion.

It is neither reasonable to expect, nor to be desired, that Mr. Kennedy, occupying as he does so important an official position in relation to the subject, should be other than extremely cautious in either adopting or condemning views which further investigation may or may not prove to be erroneous or inadequate. I therefore take his remarks to be rather the expressions of his present impressions than the result of settled conviction.

I entirely agree with him as to the actual facts presented by him. There can be no question that the river is high from one end to the other, and that floods take place at other points beside Montreal; but the present question does not concern them, neither is there any doubt as to the very slight winter variations in the hydraulic slope of the river, observed during floods; but this fact, taken only by itself, constitutes no argument, or rather might reduce it to the absurd alternative that there either could never be a flood, or that there must always be a flood. Of course Mr. Kennedy does not mean this, and I mention it only for the benefit of those not well acquainted with technicalities. If, however, it is his opinion that the whole river would have to be treated in order to remove floods from Montreal, then I cannot agree with him. The hydraulic slope of the river is composed of many various slopes, due each to the nature of the obstructions encountered, and is an average of

all. I hold it, therefore, quite possible to materially alter the slope at one spot, without at all affecting the general hydraulic slope of the whole. In fact it is a natural alteration of this kind, though in an opposite direction to that desired, that has caused the flood.

Again, no doubt, in summer the ship channel, as Mr. Kennedy says, is but a scratch in the bed of the St. Lawrence, but to my mind in winter its relative importance is vastly increased, since, judging from the few cross-sections taken, it, together with one or more of the natural channels, constitutes at certain places the sole outlet for the volume of the river, and consequently has to make up in height what it lacks in width; unless, therefore it can be shown that there is no larger area below the obstruction than at it, I can see no valid reason against enlarging the opening at the obstruction. Whatever possible difference there may be between Mr. Kennedy's opinions and mine, I think at least he will agree with me in this: that, considering the statements made as to the coincidence of floods with certain dams of ice, by Mr. Gr. shois and others, the public will be scarcely satisfied until such examinations are made as will prove or disprove their agency in causing floods in the city.

I may add that the facts adduced, so far, by the investigation, have produced a strong impression in my mind that we have narrowly escaped perhaps the heaviest spring flood that has ever visited our city. Had the late unusual thaw of ten days and nights been extended a few days longer, a movement of the ice of a very dangerous character must have taken place. This has, however, happily been averted until the ice has become so rotten as no longer to be capable of adhesion in large masses; but the lesson it teaches is certainly not to fold our hands with the Turk, and cry

Kismet; it is fate.

I remain, dear sir, your very obedient servant,

GEORGE H. HENSHAW.

Mr. Louis St. Denis, of the city of Montreal, testified as follows:-

I am a pilot and am well acquainted with the St. Lawrence and Ottawa Rivers. I would recommend, in order to prevent future inundation, that piers should be built across the Chateauguay shore from the south to the north channel, so as to retain the ice there and keep it from choking the river lower down.

The piers could be built on the shoals where the water is not more than three feet in some places and a little more in other places. A part of the work can be done this winter. For further reference I would refer you to my plan. I am well

recommended by several marine inspectors.

LOUIS ST. DENIS.

EVIDENCE OF MR. J. M. NELSON, ASSISTANT HARBOR ENGINEER.

Dynamite Useless.

Mr. J. M. Nelson stated that there was a difference of only four inches in the level of the water between Longueuil and Hochelaga on the 3rd January last. Between Montreal and the latter point there was a fall of three feet four inches, which was a little more than normal, the fall in summer being two feet three inches.

The south channel was nearly blocked up this year, there being no current to speak of and the water was forced down St. Helen's Island, and passed down in the

north channel or opposite the city.

The jam at Boucherville was over two miles in length and one mile in breadth. He considered the idea of blowing it up with dynamite was almost impracticable, and would have little or no effect, as it consisted of cakes of ice at the top and frasil below, and with a brittle, yielding substance like this, dynamite having no resistance, it could not do much good. If the dam was blown up it could jam lower down.

J. M. NELSON.

PLANTAGENET SPRINGS, ONT., 27th April, 1886.

To His Worship the Mayor, the Aldermen and the Citizens of Montreal:

GENTLEMEN,—I herewith address to you a paper written by me on the important subject of the flooding of the city of Montreal and its environs. Were it not for the loss of my flood notes, reports, &c., which I had kept for many years, and which were being in use by the late City Surveyor, I might have made this paper of more value as to precise details.

As it is, I have thrown together some particulars and explanations from memory. I have added thereto such remarks, opinions and suggestions as, in my humble opin-

ion, the importance of the subject merits.

Had I remained in the council it would have been my duty to make use of the

preparation made for it.

If I have failed to afford sufficient explanation on any part of the subject which it may be in my power to extend, it is only necessary to call on me to do so.

I am, gentlemen, yours very respectfully, WM. RODDEN.

Ice Shoves and Montreal Floods.

This subject is now and has been one of the most important before the city of Montreal. It is a subject that has received much attention during the last half century. The loss and damage suffered by the people during that time must have exceeded the amount it would have cost to have placed the streets that are below high water mark, sufficiently high to enable the people to use them without interruption, and assist in furnishing a partial remedy.

Many years ago the corporation fixed upon a higher level for flooded streets, and have done much, particularly in St. Ann's Ward, to raise them, some parts of which have received as much as four to eight, ten and twelve feet of filling. It is true there remains much to be done to finish that part of the required work, and it should be very well understood that raising the streets is not all that is needed to

save citizens from periodical flooding of their premises.

The people naturally look to their representatives in council to consider and adopt measures of relief, and also should look to their representatives in Parliament to consider whether or not the causes are outside the boundaries of the municipality of Montreal, and they should come to the assistance of the city corporation in obtaining the performance of what is needed to be done on the river and harbor works outside of the limits of the city's control, and obtain legislation for the corporation,

giving powers to do their part of the work without liability for damages.

The great efforts made to keep down taxes, the desire of members representing other sections of the city to obtain all they can from the city treasury to improve their sections, have often made it difficult to obtain suitable expenditures on the flooded section of the city, which are the outlets for the trade of the city to its harbor, the canal and railway stations. It would be out of place for me here to give particulars of the persistent efforts of members of council representing the flooded sections to secure a full share of attention, nor is it necessary I should speak of what was done in my time of membership—the work done speaks for itself; if more was not accomplished it was due to the magnitude of the required work, the impossibility of reconciling the different opinions on the causes of flooding to justify entering upon a full and perfect system of relief, and the difficulty of bringing together all the interests outside of the city limits that sooner or later must participate in the expense of the necessary work and its benefits.

I can well understand the difficulties of the position of an alderman, particularly if he had much business of his own to look after, while he is at work on extensive and troublesome municipal questions, and if at all zealous in the performance of public duties, his own interests are damaged, unless he is more fortunate than is usual

in having about him persons thoroughly reliable.

Then again, an alderman is surrounded by a multiplicity of persons interested in smaller questions turning up from day to day, pressed upon him by electors, each often unwilling to look at any subject excepting as it troubles or benefits himself. Thus the aldermen are subject to great trials, hindered often from full study of great questions, and eventually either become disgusted with the humiliating position and retire, or take an independent stand in what they consider right, and have all sorts of unjust motives heaped upon them till they feel it impossible longer to continue the connection, and leave the work they were engaged in to be longer delayed or to fall into the hands of persons unwilling or unable to give the necessary time and study to the task.

Feeling as I do the full force of the foregoing expressions, I have no difficulty in understanding now that the death or removal of a civic officer and the retiring of aldermen who labored on such important questions may to some extent account for delays, particularly when it is considered that the great majority of the council represent other sections of the city claiming their attention. These considerations have led me to the conclusion that the city council might appoint a commission with the mayor and chairman of finance exofficio members, who, with the assistance of a first-class engineer of experience in this country, acquainted with the action of the ice and the floods, could take all necessary means to consider, report upon, and eventually carry out whatever work the city council might determine to be necessary to be performed within their jurisdiction.

The Government and the Harbor Commissioners as well as adjoining municipalities, are also so largely interested in this question, it is important that co-operation be secured from them.

Any legislation necessary should be at once obtained, that the city may have full powers to act in the adoption of such works as may be found necessary, and that the proposed works may be done without the city being exposed to liability for damages for their performance.

Following the foregoing introduction of the subject, it may be proper to explain that the writer was too young to observe the action of the ice and floods previous to the floods of 1837-38 and of the following spring. I well remember that our shop in St. Paul Street and others adjoining were flooded, ice was piled along the river banks, buildings there were injured, the present site of St. Ann's Market thence to the river was an open creek which extended to St. Joseph suburbs, the old Montreal College was surrounded with water as if standing in a lake, extending round to Craig Street, that was then an open creek, overflowing its banks from Fortification Lane to Jurors Street.

Skaters resorted to the open creek at the foot of McGill Street which overflowed St. Paul Street, Point à Calière, and thence to the Lower Lachine Road, along the valley to near the Fraser Farm, and extending also to the lowlands of Cote St. Paul, and from the canal along the lowlands near the Upper Lachine road banks, continuing through to Bonaventure and Craig Streets.

The winter flood of 1837-38 was remarkable for its height and extent, during very cold weather. Much loss and damage occurred, property on the river banks was injured, and there was great suffering by the people flooded. Very little assistance could be taken to them till the ice was so frozen that sleds could be taken by hand, and skaters could travel from St. Paul Street near the old market, now Custom House Square, to Lower Lachine around to Bonaventure and Craig Streets, and on the way look into flooded houses from the second floor windows. So great was the outcry on this occasion, and some time after it, that the Commission of Royal Engineers was ordered to investigate and report upon the causes, and the remedies.

Their report was presented in 1841. I was a clerk in St. Paul Street at the time and remember adding to my flood notes that I commenced in 1837-33, the expressions of old citizens, disapproving the report of engineers, and contending that the ice dams that formed in front of the city were not the only or continued cause of floods; that floods had also been caused by ice shoves that occurred far below the city and far above it.

On one of those occasions of general floods, the roar and crashing of descending ice brought out St. Paul Street merchants to view the immense fields of ice evidently from the upper lakes, passing down below the city. Piles could be seen as far as the eye could discern, evidently grounded on shoals as far as Boucherville or beyond it.

1 remember well the cluster of merchant neighbors viewing the magnificent but terrible crushing and piling fields of ice, while they laughed at the idea of \$90,000 to \$100,000 being of much service, and asked one another how many millions of dollars would it take to afford permanent relief. There stood within my hearing such men as the late John Torrance, John Frothingham, Jacob Dewitt, Horatio Gates, Wm. Lyman, Esquires, and others, then as well known. In St. Paul Street many stores and shop floors were again flooded, and many goods damaged. I continued to follow enquiry into the periodical cause and effect of such magnificent yet dangerous spectacles, and I gave attention to the remedies suggested. Those great floods were not confined to Montreal. The changing features of ice jams and floods has been such that, within the twelve months, notes have been taken of shoves and floods that at intervals operated upon every low-lying section of country from Sorel to Beanharnois, extending thence across the Lake to Isle Perrot and St. Ann's. Such extensive floods as the one here referred to were preceded by low waters in the river during the time the ice formed that fall and winter.

The early part of the winter was very cold, accompanied by very light snow falls, and the ice on rivers and lakes formed very thick. In the early part of March mild weather and rain converted the snow on the ice into water, and weakened the ice much more on the upper lakes than upon Lake St. Louis and the harbor; some ice from above that lake came down to the shoals near Beauharnois, causing higher water above. Frost set in on the third night of the thaw; the following morning travelling on the river to Beauharnois from Point Claire was resumed, and I spent that day on the road along the river through Lower Lachine, Point Claire to Isla Perrot, thence accross through Beauharnois to St. Timothé and back to the city, doing 75 miles, and as I passed along I viewed each point of interest, which produced a conviction in my mind that the spring flood would be serious and widespread, inasmuch as the ice from Beauharnois was very strong, while that on the lakes above was reported to be much damaged by the thaw, and likely to come down

earlier than usual.

The shoals in the narrows above St. Ann's lock were covered by ice jams, the water above was much raised, for several days it was dangerous getting on and off the ice there. Early in April the thaw set in, part of the lake ice increased the jam at St. Ann's and it was very little of the water from the Ottawa passed that point, it passed for some time in the Back River channel. That thaw broke up the ice on the upper lakes, rising of the waters in the channels brought it down, till it came in contact with the jams on the shoals between Lachine and Beauharnois, and there increased the obstruction which held back the water, flooded that town, Chateauguay, part of Isle Perrot, St. Ann's and Point Claire, and obstructed travel on the land roads till the height of water increased enough to lift the ice jams from the shoals and carry the fields of ice down to the shoals between the Victoria Bridge and the Lachine Rapids.

There a large portion of it remained for a time, backing the flood upon the south shore of the river, and extending beyond and above Laprairie, also on all low places of Lower Lachine Road, and the flood came into the city through the drainage outlets under the Lachine Canal, and poured rapidly down William Street to St.

Paul Street, and down Bonaventure Street to Craig Street.

While thus the city was being flooded from the west, the water was also operating upon the ice jams, eventually carrying them past the Victoria Bridge into contact with the ice in front of and below the city. The contest between the yet strong ice below, and the very large quantities from above was one of the most grand and terrific scenes of the kind ever witnessed. Mountains of ice were piled up on the river banks as far down as Dalhousie Canadian Pacific Railway station, and across to St. Helen's and St. Lambert. Had not the island been the stopping place the village of Longueuil would have been destroyed. This stoppage threw the flood for a time back on the city till it reached sufficient height to raise the ice jam and divide the flow of waters to both sides of St. Helen's carrying the flood to parts of Hochelaga, and to all the south shore on to below Boucherville Islands. The river craft wintering there were injured, and the population all along suffered. While this was going on, the ice from the Ottawa was on its way down, a great part passing by the Back River to meet the St. Lawrence ice below the Montreal Island, and both joined passing downwards. At Sorel they met the ice from the Richelieu, did much damage to the river craft and wharves there, and flooded the place. On this occasion the Montreal flood stood at a great height till the breaking up of the ice at Sorel, which came from the St. Lawrence, the Ottawa and the Richelieu.

We may here ask what kind of piers could have been placed in the river to hold the ice above the Victoria Bridge, or above Lachine, and what would they have cost? That if the ice was held there how much of the country above the piers would have been flooded, and who would pay the people that suffered damage?

In the foregoing I have described as brief as possible what occurred during a general flood on one occasion. Fortunately such extensive and far-reaching effects of the river obstructions are of rare occurrence; they are such as to tax the ingenuity of the highest engineering talent, to fully understand and demonstrate thoroughly perfect remedies to obviate the difficulties all along the line.

The question now naturally suggests itself, what has the general flood to teach

us in connection with what suffering Montreal endures from floods?

lst. There is no difficulty in arriving at the conclusion that we cannot control the action of the ice in its departure and onward course, or, in other words, keep it from coming down upon us without expending a large sum of money, and if authority was obtained from Parliament it would cause the city to be liable for all damages that might arise to the people and their property that would be in any way injured thereby.

2nd. That even if this could be done there is not any assurance of perfect relief from floods by that means, owing to the nature of the channel from the city front downwards and its liability to become obstructed at some of the shoals below the city, when all the ice below the piers would collect, and with frasil forming at different points that would be carried down to the place of obstruction, and there cause contraction that would not admit of the passage of the great volume of water that would come down the St. Lawrence and Ottawa rivers each season that the thaw or rains would set in from the west and south much earlier than they do from the district of Montreal downwards.

Having explained my experience and information of a general flood extending over a distance of about sixty miles, over twenty of which are above the city, I will now explain a few of the inundations and their causes that have occurred in my time, producing the greatest damage to Montreal and its adjoining municipalities. I have observed at least six different places that the ice has formed dams by being shoved

and piled in as many different forms at different times.

The effect of each one of these was to hold back the flood upon the city till the necessary head of water was produced to lift the ice out of the way. This convinced me that the removal of the obstructions in the channel from below Lachine Rapids to Bout de l'Isle, would have to be considered in the general plan of river works, should such works be intended as a perfect remedy. Yet it would be possible to afford partial relief by performing the most important of the river works, which if carried out, would facilitate the adoption of city works, with less disturbance of existing drainage, and less expensive surface works.

The six places referred to may be described as follows:—

1st. The shoals above the Victoria Bridge. When the ice forms there and is added to by ice at times descending from the shoals above, while ice below the bridge remains firm, then the accumulations above remain firm, reduce the water way, and an early thaw above brings down ice as well as water, and thus increases the ice jam

and the flood, which I have seen operate in two ways: once the ice was driven to the height of about sixteen feet over the south embankment of the Victoria Bridge, on another occasion the ice was piled on the banks at the south-west side of the bridge; one caused greater flood on the south-of the river from St. Lambert to Laprairie till the channel opened near the city, the other sent the flood to Lower Lactine; letting it into the city by the low lands of River St. Pierre and Point St. Charles, thence into the city at William Street, St. Joseph Street and Bonaventure Street West.

2nd. The harbor showls. When the ice forms there to a great strength and water is low, the ice from the Victoria Bridge shoves to it and piles on those shoals till it reaches the St. Lambert wharf and south banks of the river there; eventually it closes the water-way till the water-lifts the ice. On some occasions the greatest weight of ice will be torced to a great height on the city side, then the channel will first open on the south side of St. Helen's Island, making an opening on the Longueuis side and causing a great flood there; on other occasions the strongest and greatest body of ice will form on the St. Lambert wharf and south channel, then the harbor and city will suffer most from the flood, till it lifts the ice between the city and the islands. The shove in that case is carried to the shoals below the islands and eventually spreads towards Longueuil till it again rests upon shoals, or, by force of the water, is carried on till the accumulation so increases as to form another dam, above or below Longueuil, as the case may be:

3rd. The shoals and Isle Ronde between Hochelaga and Longueuil. When the ice forms above Victoria Bridge and from Lachine upwards before the harbor ice is tirm, the ice has also become firm on those shoals below St. Helen's I-land. A change of weather and of wind has sent the harbor ice with some from above, down the carrent to those shoals till they become packed and form a dam, which gains additional strength by ice descending to it backing the waters up to flood the city till again forced onwards down the river, or into larger piles on shoals below Longueuil.

or is so broken up as to open the channel,

4th. The shoals from Hochelaga and below to Longue Pointe across the river and

from Longueuil down the same distance on the south side.

When the ice forms first and firmly here and below, and the ice continues to descend in moderate quantities, it packs and fills the channel, tenching all downward obstructions in the river and gradually raises the water, still filling as it receives the descending ice, till a cold night or two adds to the strength, and a dam is found flooding all above it till the water lifts the ice and clears the channel.

It has occurred that the same operation as is above described takes place here with the same effect. Frequently the effect is prolonged by the descending ice continuing to pack on the shoals upwards till St. Helen's Island is reached; lake ice coming down at times keeps up the supply till the whole river is filled from Victoria. Bridge down to the Longue Pointe ice jam, thus the fact of so many miles of ice packed from that place or below it to the city, makes it more difficult to remove or lift, consequently the greater the flood and the longer period it must continue till the force of the water moves it down, sometimes only to pile it up again in some other place below.

6. The shoals from Bout de l'Isle extending to Boucherville Island and the june

tion of the St. Lawrence and Ottawa Rivers downwards.

In this place, ice of the St. Lawrence and the Ottawa at times meet. If the ice below the place of meeting is strong and packed the coming ice adds to its place, creates a jam which extends upwards, as in previous cases is explained; on some occasions it makes the complication more serious and extensive, creating a fleed of long or short duration, according to the weather, the strength of the ice below; and the quantity arriving from the lakes above?

Thus far I have endeavored to show in a rough way what I have seen different times at these places of the action of the ice and the waters of the river, and how they combine to produce the fleeds that cause so much less to Montreal and adjoining municipalities. I have explained how a general fleed is produced. One of those

floods was very alarming and injurious; two or three others such occurring in my time were not so far reaching or destructive. One such occurring in mid winter would be most serious. It is fortunate that cold set in to check the thaw and rainfall this year, or Montreal would have suffered dreadfully; too much occurred as it was.

One of the great dangers lies in a thaw setting in with rainfalls west and south of Montreal, while the ice at and below the city is strong, and resists being moved down by the coming ice from above. About one out of every five floods has been a general flood, extending below and above Montreal, and about one in three Montreal has become the chief sufferer. Next examine what has been done to remedy flooding.

After the great flood of 1837-38 the Government ordered an examination and report from the Royal Engineers. In 1841 it was made. From it we learn that their attention was confined to a section of the river not high enough up, nor sufficiently low down the river. Evidently they were not aware of the extent and location of the several shoals upon which ice piled, or, if they were, they did not consider them of importance. The substance of their report suggests their unwillingness to recommend any important work upon the river, although they mention "leaving it for future consideration."

They recommend works to raise the revetment wall, change the course of the River St. Pierre, close all culverts and drains, draw off the city streams to a lower level, and outside waters to be drained by Craig Street—all at an estimated expenditure of about \$94,000.

When I entered the city council as representative of St. Ann's Ward, I continued investigating this subject, and I obtained the opinion of Messrs. Sir Wm. Logan, John Young, John Redpath and John Molson, and others, which were unanimously given: That the report of the Royal Engineers did not cover the whole ground and causes of the floods, that the expense to be incurred was greatly understated, and that the works contemplated were not sufficient to perfect a remedy; they also agreed with me in urging the filling up to the water level all the low parts of the city subject to floods.

While the filling up of low places was going on authority was obtained from the city council to make surveys of ice jams. This was done from time to time by the city surveyor and his assistants, the maps of which show that the effect is as herein stated, and that when the ice jams extend far below the city the difference of water level between the Victoria Bridge and below Hochelaga is but trifling, thus the difficulty of draining into the river within the city limits is serious when there is a high flood, involving the necessity of going far below the city to escape the difficulty caused by water breaking up the discharging outlets. When the ice jams extend to the foot of the island of Montreal, &c., the Ottawa River ice joins that of the St. Lawrence River on the sheals below, the drainage difficulty is further augmented.

It was my desire that the late Mr. McQuesten, city surveyor, should make a thorough report of the different ice jams and floods, and his surveys taken in each winter when he was at work upon it. I gave him the use of my ice and flood notes, taken from 1837-38 onward. These I have not been able to find, therefore I have written these descriptions on floods from memory without giving the dates and

measurements my memorandum contained.

It should be remembered that the city has expended a very large amount in improving the flooded district. Craig and Commissioners Street creeks are drained and filled. St. Paul Street, College Street, St. Joseph Street and all streets between it and the canal and Point St. Charles, were more or less raised from 4 to 10 feet, in some places there were 12 feet of filling; Bonaventure Street, low places were raised and tunnelled. The waterworks embankments were raised, and a series of large and expensive tunnels were constructed, some of which were made to discharge at places I could not approve, they furnish direct and speedy means of conveying river floods to the city, from below the Victoria Bridge to Point St. Charles, from the harber to William Street to Griffintown, and from the same place through to the McGill Street tunnel to St. Paul, Craig and Bonaventure Streets.

The large amount expended on drainage and its yet imperfect state, is evidence

of the accuracy of views I frequently advocated in council, namely:

That before such extensive works were undertaken, a perfect system should be fully considered with the assistance of the best engineering talent obtainable, and what is done should be a part of the whole, and suitable for the future city of Montreal. It is impossible to expect a city surveyor, who has the general and ordinary street works of the city to direct and provide for, to give up the time and study necessary to accomplish within any early period, preparatory measures and calculations for the works of so extensive an undertaking as perfect protection from floods.

I do not pretend to possess engineering skill, yet my studies have been in that direction, which, with the amount of time and attention I have had occasion to give to all such matters, and more particularly to this, and the waterworks questions, with other public works of improvement in the city of Montreal, I may be excused if on so important an occasion, I offer opinions touching the various remedies for floods which have been advanced and discussed since 1841.

It is evident from the various forms taken by the ice jams that the floods are caused by ice accumulations on the shoals and islands in the river at many places. Some relief might be obtained by the removal of a part of the river obstructions which is a work that could only be undertaken by the Government and the Harbor Commissioners, which work might be made of service to the Montreal harbor and an advantage to inland as well as sea going vessels—each piece of obstruction that

is removed would assist in the remedy.

The obstructions begin above the Victoria Bridge and extend to the city front, taking in the St. Lambert wharf and shoals, also the south channel at St. Helen's Island, and the north channel from St. Helen's down. The removal of any one obstruction would not perfect the remedy, inasmuch as the damage caused by floods extends from the foot of Beauharnois Canal to all the low lands, as far down at times as Sorel, when ice jams form on the islands below Sorel. Therefore there appears to exist a fair claim on the Government for assistance, such as has been given on smaller streams and less important places. Parliament should act at once.

City and Suburban Drainage.

When the city undertakes to perform works necessary to keep out river floods, extensive drainage is needed for surface water from thaws and raintalls over a large area outside of the city; its drainage, water works and that of the city must be provided for, and in a great measure taken to discharge far below the city. Any system which does not embrace all outlying lands draining towards the city cannot be considered reliable. If the connection between city drains and the river is shut off there will be floods in the spring, caused by the drainage and thaws or rains unless provided for. Therefore it is important to make arrangements with all outside municipalities to provide for their part of the expense of drainage, or to become a part of the city. Should the city find it necessary (as I believe it will) to carry drainage through the municipality north-east of the city, the power to do so, or annexation, would be necessary.

The land draining to the city extends from beyond Monklands on the mountain along the mountain ridge to its north-east end, thence to north of Mile End, through to Petite Cote, thence along the high lands north-easterly to below Hochelaga. There will be added to this the drainage of St. Gabriel, parts of Verdun and all low lands north of the canal from the city limits, for some distance above St. Henry.

The city surveyor would have no difficulty in preparing a plan showing the limits of the territory which sends its water-shed to within the city limits, and the

distance below the city it should discharge.

In consequence of the insufficiency of the Craig Street and other tunnels, it would be necessary to construct others at higher levels, each commencing at the extreme western proposed extension of city limits and extending to the proposed south-eastern limit or near it; these discharge into one or more larger tunnels afford-

ing sufficient capacity and discharging at the lowest possible point on the island of Montreal, to secure a proper outlet, without hindrance from river floods or ice jams. Even if the city should not undertake pumping of water from the sewers that discharge into the harbor, the day is not far distant when tunnels at higher points in

the city would be necessary.

If it is desired to adopt a system of closing those sewers and erecting pumping machinery it is very important that drainage provision should first be made for floods entering the city from the river above Victoria Bridge, as well as for heavy spring thaws and rainfalls. When ice shoves come on, about the same time in the spring, it will be very difficult to escape being flooded, either from the tunnels or drains that receive back water from the river, while they have enough to do as it is to carry off city and suburban drainage unless aided by additional drainage discharging further down the river, or that every place of discharge be supplied with powerful, well constructed and well protected pumping machinery. I esteem it important that there should be established an outlet or outlets further north-east for part of the drainage, rather than depend entirely on pumping machinery.

Apart entirely from the flood question, portions of the main tunnels that should run east and west on higher levels are extremely important from a sanitary point of

view.

Much more might be written on this subject that might appear in the course of the discussion on details, that need not now be put on paper.

The conclusions of this paper may be summed up as follows:

1st. The immediate cause of floods in Montreal is the descent and accumulation of large quantities of ice on the shoals and narrow channels, islands, &c., that are situated at several places in the river from below Sorel to the Lachine Rapids.

The Government and the Harbor Commission are the only and proper authorities to perform works on the river outside of the city limits on the frontage and

elsewhere.

When the ice forms a dam above the Victoria Bridge, the flood enters the city from the Lower Lachine road and drains. When it forms on shoals in the harbor, floods enter the drains at Point St. Charles, the low places there and Lower Lachine road; when it forms on the shoals and narrow channels of St. Helen, floods enter the drains of Commissioners, William, McGill, St. Joseph, Bonaventure and Craig Streets, by way of the McGill Street tunnel; when the ice obstructs the north and the south channels at St. Helen's Island, the water rises very rapidly till the ice is lifted and carried to shoals below, either to proceed down the river and lower the flood or to meet resistance from strong ice below the island that rests upon shoals opposite Hochelaga, it is again there hindered from moving and forms another dam that prolongs the flood and produces a height of water that overflows the revetment wall and extends the flood to all the lower parts of the city; when the obstruction is moved down or forms between Longue Pointe and the Boucherville Islands, or further down the river, it floods low places both sides of the river, and passes up the city tunnels that discharge below the city, obstructs all city drainage and hinders the passage away of refuse drainage, thus becomes injurious to health and offensive to even citizens living on higher levels.

These floods vary according to the weather, to storms and to the strength of the

ice at and below the city, as compared to that on the upper lakes and bays.

2nd. The remedies that have been suggested are various and extensive, most of those that have appeared seem hasty conclusions, without a full consideration of the whole question and knowledge of all the difficulties,—even engineers contradict one another; nevertheless I have endeavored to consider every point of importance, that my humble efforts admitted, to arrive at conclusions, now presented for consideration by any who may feel disposed to bring a high order of skill and acquired attainments to bear upon the subject.

Recommendations.

Leave the river works to the Government and the Harbor Commissioners; betain from the Government and the Harbor Commission assistance to rebuild the

revetment wall, elevate and strengthen it all along the harbor front, till it reaches the embankment of the Victoria Bridge.

Convert the road along the revetment wall into a boulevard, and continue it to the water-works embankment, make the whole sufficiently high and strong to keep out high floods. It the municipality of Verdun annexes to the city, the embankment might be continued from Victoria Bridge along the river front as far up the Lower Lachine road as necessary.

Construct a tunnel under the above roadway of the capacity necessary to carry drainage below the city, and erect there a pumping station to be used when required.

Fill up to a uniform level all low public streets and places that ordinary floods occasionally cover.

Annex all outside municipalities that drain and send water into the city, and that are so located as to be on the route to be adopted for extending city tunnels to

a lower place of discharge.

Construct two main tunnels on higher levels than Craig Street to relieve the tunnel there, and let the Craig Street tunnel and those about it discharge into one or more larger tunnels, to be constructed far below the city, discharging into the river at a point as little as possible likely to be interrupted by back water from high floods; and build a pumping station to clear tunnels, if necessary at high floods.

It would be presumption for any other than an engineer of great experience and much knowledge of the localities to undertake the task of considering this question in all its details, without obtaining full and perfect information as to all phases of the action of the ice and waters; and it is out of the question for any person not a first class engineer, even then, to estimate and determine all questions connected with the perfect completion of works in all their details and furnish precise figures to which the cost would amount.

Canada need not import engineers fitted for the task, there is sufficient and reliable engineering talent available in Canada to estimate and direct the work

without resorting to expensive experiments.

It is to be hoped that the Government, the Harbor Commission, the Corporation of Montreal, and all the adjoining municipalities, will not hesitate to join heartily in the important work of reclaiming Montreal and its neighborhood, as well as all places that suffer, and thus demonstrate the ability, the enterprise, and the power to subdue all difficulties necessary to retain for the commercial metropolis of Canada that supremacy which thus far has been so nobly earned by our people.

The whole respectfully submitted,

WILLIAM RODDEN.

PLANTAGENET SPRINGS, April, 1886.

N. B.—Since the foregoing was written, Montreal and the surrounding municipalities have suffered from one of the most destructive floods that has been experienced. The ice shoves of last winter accumulated upon the shoals fronting the city and below it. The cold snap that followed ice shoves had the effect of holding the ice in compact masses, in many places resting on the river bottom, till the thaw set in on the river and lakes above, and there swelled the floods that raised the ice while yet strong, and brought it down before the harbor ice had weakened enough to be moved away by the force of the descending strong ice and flood. The resisting power of the piles of ice in and below the harbor caused the descending ice to fill the channels and back up the waters, till the flood reached a height over every other flood but one, in the memory of the writer, and caused much more damage than any preceding flood. Some of this damage need not have occurred had there been a full appreciation of the signs of danger to be found in the strength and quantity of ice mear Montreal, when compared with the strength of ice above and the probability of its early downward movement being caused by the early thaw in the west.

WILLIAM RODDEN.

On the Packing of the Ice in the River St. Lawrence.

A paper by the late Sir William E. Logan, read before the Geological Society of London, and published in its proceedings Vol. III, page 766, June, 1842. Reprinted, with the author's permission in the Canadian Naturalist, Vol. III, page 115, anno, 1853.

The Island of Montreal stands at the confluence of the rivers Ottawa and St. Lawrence, and is the largest of several islands splitting up these mighty streams, which cannot be said to be thoroughly mingled until they have descended some miles below the whole cluster.

The rivers first come in contact in a considerable sheet of water called Lake St. Louis, which separates the upper part of the Island of Montreal from the southern main. But, though the streams here touch, they do not mingle. The waters of the St. Lawrence which are beautifully clear and transparent, keep along the southern shore, while those of the Ottawa, of a darker aspect, though by no means turbid, wash the banks of the island; and the contrast of color they present strongly marks their line of contact for many miles.

Lake St. Louis is at the widest part about six miles broad, with a length of twelve miles. It gradually narrows toward the lower end, and the river as it issues from it, becoming compressed into the space of half a mile, rushes with great violence down the rapids of Lachine, and although the stream is known to be upwards of eight feet deep, it is thrown into huge surges of nearly as many feet high as it passes over its rocky bottom, which at this spot is composed of layers of trap ex-

tending into floors that lie in successive steps.

At the termination of this cascade the river expands to a breadth of four miles, and flows gently on, until it again tecomes cramped up by islands and shallows opposite the city of Montreel. From Windmill Point and Point St. Charles, above the town, several ledges of rock, composed of trap lying in floors which in seasons of low water are not much below the surface, shoot out into the stream about 1,000 yards; and similar layers pointing to these come out from Longueuil on the opposite shore. In the narrow channel between them, the water, rushing with much force, produce the Sault Normand, and cooped up a little lower down by the Island of St. Helen and several projecting patches of trap, it forms St. Mary's current.

The interval between St. Helen and the South Shore is greater than that between it and Montreal; but the former is so floored and crossed by hard trap rocks, that the St. Lawrence has as yet produced but little effect in wearing them down, while in the latter it has cut out a channel between thirty and forty feet deep, through which the chief part of its waters rush with a velocity equal to six miles per hour. It is computed that by this channel alone upwards of a million of

tons flow past the town every minute.

Between this point and Lake St. Peter, about fifty miles down, the river has an average breadth of two miles, and proceeding in its course with a moderate current, accelerated or retarded a little according to the presence or absence of shoals, it enters the lake by a multitude of channels cut through its delta, and forming a group of low flat alluvial islands.

The frosts commence about the end of November, and a margin of ice of some strength soon forms along the shores of the river and around every island and projecting rock in it; and wherever there is still water, it is immediately cased over.

The wind acting on this glacial fringe, breaks off portions in various parts, and these proceeding down the stream constitute a moving border on the outside of the stationary one, which, as the intensity of the cold increases, is continually augmented by the adherence of the ice-sheets which have been coasting along it; and as the stationary border thus robs the moving one, this still further outflanks the other, until in some part the margins from the opposite shores nearly meeting, the floating ice becomes jammed up between them, and a night of severe frost forms a bridge across the river. The first ice bridge below Montreal is usually formed at the

entrance of the river into Lake St. Peter, where the many channels into which the

stream is split up greatly assist the process.

As soon as this winter barrier is thrown across (generally toward Christmas) it of course rapidly increases by stopping the progress of the downward floating ice, which has by this time assumed a character of considerable grandeur, nearly the whole surface of the stream being covered with it; and the quantity is so great that, to account for the supply, many, unsatisfied with the supposition of a marginal origin, have recourse to the hypothesis that a very large portion is formed on and derived from the bottom of the river, where rapid currents exist.

But, whatever its origin, it now moves in solid and extensive fields, and whenever it meets with an obstacle in its course, the momentum of the mass breaks up the striking part into huge fragments that pile over one another; or if the obstacle be stationary ice the fragments are driven under it and there closely packed. Beneath the constantly widening ice barrier mentioned an enormous quantity is thus driven, particularly when the barrier gains any position where the current is stronger than

usual.

The augmented force with which the masses there move pushes and packs so much below that the space left for the river to flow in is greatly diminished, and the consequence is a perceptible rise of the waters above, which, indeed, from the very first taking of the bridge gradually and slowly increase for a considerable way up.

There is no place on the St. Lawrence where all the phenomena of the taking, packing and shoving of the ice are so grandly displayed as in the neighborhood of Montreal. The violence of the currents is here so great, and the river in some places expands to such a width, that whether we consider the prodigious extent of the masses moved or the torce with which they are propelled, nothing can afford a more majestic spectacle or impress the mind more thoroughly with a sense of irresistible power.

Standing for hours together upon the bank overlooking St. Mary's current I have seen league after league of ice crushed and broken against the barrier lower down, and there submerged and crammed beneath, and when we reflect that an operation similar to this occurs in many places from Lake St. Peter upwards, it will

not surprise us that the river should gradually swell.

By the time the ice has become stationary at the foot of St. Mary's current the waters of the St. Lawrence have usually risen several feet in the harbor of Montreal, and as the space through which this current flows affords a deep and narrow passage for nearly the whole body of the river, it may well be imagined that when the pack-

ing here begins the inundation rapidly increases.

The confined nature of this part of the channel affords a more ready resistance to the progress of the ice, while the violence of the current brings such an abundant supply, and packs it with so much force, that the river dammed up by the barrier, which in many places reaches to the bottom, attains in the harbor a height usually twenty and sometimes twenty-six feet above its summer level; and it is not uncommon between this point and the foot of the current within the distance of a mile to see a difference in elevation of several feet, which undergoes many rapid changes, the waters ebbing or flowing according to the amount of impediment they meet with in their progress from submerged ice.

It is at this period that the grandest movements of the ice occur. From the effect of packing and piling and the accumulation of the snows of the season, the saturation of these with water, and the freezing of the whole into a solid body, it attains the thickness of ten to twenty feet, and even more; and after it has become fixed as far as the eye can reach, a sudden rise in the water, occasioned no doubt in the manner mentioned, litting up a wide expanse of the whole covering of the river so high as to free and start it from the many points of rest and resistance offered by the bottom, where it had been packed deep enough to touch it, the vast mass is set in motion by the whole hydraulic power of this gigantic stream. Proceeding onward with a truly terrific majesty, it piles up over every obstacle it encounters, and when socced into a narrow part of the channel, the lateral pressure it there exerts drives

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the bordage up the banks where it sometimes accumulates to the height of forty or fifty feet. In front of the town of Montreal there has lately been built a magnificent revetment wall of cut limestone to the height of twenty-three feet above the summer level of the river. This wall is now a great protection against the effects of the ice. Broken by it, the ice piles on the street or terrace surmounting it, and there stops; but before the wall was built, the sloping bank guided the moving mass up to gardens and houses in a very dangerous manner, and many accidents used to occur.

It has been known to pile up against the side of a house more than 200 feet from the margin of the river, and there break in at the window of the second floor. I have seen it mount a terraced garden twenty feet above the bank, and crossing the garden enter one of the principal streets of the town. A few years before the erection of the revetment wall, a friend of mine, tempted by the commercial advantages of the position, ventured to build a large cut stone warehouse, 180 feet long and four or five storeys high, closer than usual upon the margin of the harbor. The cellar floor was not more than eight feet above the summer level of the river. At the taking of the ice, the usual rise of the water of course inundated the lower storey, and the whole building becoming surrounded by a frozen sheet, a general expectation was entertained that it would be prostrated by the first movement.

But the proprietor had taken a very simple and effectual precaution to prevent this. Just before the rise of the waters he securely laid against three sides of the building at an angle of less than 45°, a number of stout oak logs a few feet asunder. When the movement came the sheet of ice was broken and pushed up the wooden inclined plane thus formed, at the top of which meeting the wall of the building, it

was deflected into a vertical position, and fell back.

In this manner such an enormous rampart of ice was in a few minutes placed in front of the warehouse as completely shielded it from all possible danger. In some years the ice has piled up nearly as high as the roof of this building. Another gentleman, encouraged by the security which this warehouse apparently enjoyed, erected one of great strength and equal magnitude on the next water lot, but he omitted to protect it in the same way. The result might have been anticipated. A movement of the ice occurring, the great sheet struck the walls at right angles, and pushed over the building as if it had been a house of cards. Both positions are now

secured by the revetment wall.

Several movements of the grand order just mentioned occur before the final setting of the ice, and such is immediately preceded by a sudden rise of the river. Sometimes several days and occasionally but a few hours will intervene between them; and it is fortunate that there is a criterion by which the inhabitants are made aware when the ice may be considered at rest for the season, and when it has therefore become safe for them to cut their winter roads across its rough and pinnacled. surface. This is never the case until a longitudinal opening of considerable extent appears in some parts of St. Mary's current. It has embarrassed many to give a satisfactory reason why this rule, derived from the experience of the peasantry, should be depended on. But the explanation is extremely simple. The opening is merely an indication that a free sub-glacial passage has been made for itself by the water, through the combined influence of erosion and temperature, the effect of which, where the current is strongest, has been to wear through to the surface. The formation of this passage shows the cessation of a supply of submerged ice, and a consequent security against any further rise of the river to loosen its covering for any further movement. The opening is thus a true mark of safety. It lasts the whole winter, never freezing over even when the temperature of the air reaches 30° below zero of Fahrenheit, and from its first appearance the waters of the inundation gradually subside, escaping through the channel of which it is the index.

The waters seldom, if ever, however, fall so low as to attain their summer level but the subsidence is sufficiently great to demonstrate clearly the prodigious extent to which the ice has been packed, and to show that over great occasional areas it has reached to the very bottom of the river. For it will immediately occur to everyone that when the mass rests on the bottom its height will not be diminished by the

subsidence of the water, and that as this proceeds the ice, according to the thickness which it has in various parts attained, will present various elevations after it has found a resting place beneath, until just so much is left supported by the stream as is sufficient to permit its free escape.

When the subsidence has attained its maximum, the trough of the St. Lawrence therefore exhibits a glacial landscape, undulating into hills and valleys that run in various directions, and while some of the principal mounds stand upon a base of 500 yards in length, by 100 or 200 yards in breadth, they present a height of 10 to 15

feet above the level of those parts still supported on the water.

On the banks of the St. Lawrence, in the neighborhood of Montreal, there is an immense collection of boulders, chiefly from rocks of igneous origin, and among them syenite greatly abounds. They are of all sizes, but many are very large, and multitudes must be tons in weight. From their appearance above the surface in shallow parts of the river, it is very probable the bed of it teems with them also; and it is remarked by the inhabitants that the positions of these boulders, both in the river and on the banks, frequently appear changed after the removal of the ice in the spring.

I spent several days in the autumn of last year examining the boulders along shore, all the way from Montreal to Lachine, a distance of 9 miles; and on again looking at them in the spring I missed some which had particularly attracted my attention, but as I had not mapped their positions I may inadvertently have passed them over. But when we consider the manner in which the ice packs and subsequently moves, it cannot fail to appear a very probable agent in transporting these

blocks.

Closely jammed together down to the very bottom of the river over such extensive areas as have been mentioned, and there solidited by severe frosts, around the projecting materials that present themselves to its grasp, the ice must seize a multitude of the loose boulders below; and not only will these be carried away, occasionally to very considerable distances, when it breaks up in the spring, but firmly set in their glacial matrix, they will, when, in the course of the movements that occur, such masses as hold them are forced over shallow places act as gravers to register in parallel grooves on the face of such rocks as they encounter a memento of their progress as they pass along.

The boulders in the middle of the river may at once be occasionally carried to considerable distances; but it can scarcely be so with such as are stationed at or near the borders. For though these may become packed and embedded in marginal ico, and by the force of a general movement or shove as it is termed by the inhabitants, be driven obliquely up the bank, as soon as this ceases they will there be latt; and as these general movements occur only three or four times during a season, and are never of long continuance, and even where the marginal ice is driven up the bank the friction it suffers soon causes succeeding portions to pile over one another, it is

evident the boulders would not be carried by it to any very great distance.

When a break up occurs in the spring, it is the great body of ice in the middle of the river that is carried away, which separating from the grounded portion on the margin, leaves this to be melted down by the increasing temperature of the season. The movements of succeeding winters may push marginal boulders farther and farther on, but they must at the same time have a tendency to carry all within a certain range gradually nearer to the bank, and at last place them in a position at the very limit of their influence. And it is certainly the case that in the neighborhood of Montreal there are in many places along the borders of the river collections of boulders sufficiently great to induce the supposition that their presence may be accounted for in this manner.

It is not, however, only on the immediate banks of the St. Lawrence that boulders abound. They are more or less apread over the whole island of Montreal, and over

the plains on the opposite side of the river.

I do not pretend to have ascertained their distribution with the precision necessary to permit the expression of an opinion as to the causes which placed them, but

I may state that they appeared to me more abundant in the upper part of the island than in the lower, and that proceeding down the valley of the St Lawrence they ceased altogether not many miles below the island in question; and it may be further remarked that they did not seem of less weight at the limit of their range than elsewhere.

(Translation.)

Captain Charles Leger, of Lachine, expressed his views as to the mitigation of the floods, as follows:—

In order to understand well what I am going to say to you, you must listen well to me. I have navigated the St. Lawrence and the Ottawa during some thirty years, and I know these rivers thoroughly well. When the wind is south the ice breaks up from about three miles above Isle Dorval to below Lachine. When the wind is north or north-east the ice all breaks up in the large bay of Pointe Claire.

On the 3rd, 4th, 5th, and 6th of January, 1886, the ice was broken up below Isle Dorval, the wind veered round north-east on the evening of the 8th of January, a very strong high wind and then very cold; on the 9th there was a heavy snow storm and then the same wind, and the ice broke up to the large bay of Pointe Claire, and came down on the 10th and the 11th, which was what caused the floods at Montreal.

On the 15th, 16th and 17th January, 1886, the ice coming from Pointe Claire passed Lachine, and caused the water to rise here 15 inches. On the 22nd, 23rd 24th, 25th, 26th and 27th, the frasil coming from Lake St. Louis below the ice, came down the river in front of Lachine in quantity, so much so that the cancemen had difficulty in getting the mail across from one side of the river to the other, the water instead of rising fell a good deal.

I would suggest that ten (10) piers of fifty feet square each and ten feet high be constructed from Isle Dorval to Isle St. Nicolas, a distance of three thousand (3,000) feet in width, under my direction. I would place the piers and the booms below the foot of the shoals there, where there are only two feet of water at low-water, so as to stop the small ice of the autumn until the ice takes of itself, until all the other ice takes at the same time out to the middle of Isle Dorval.

I would leave free the channel for steamboats, rafts, barges and boats, which cannot pass elsewhere than in that channel, which is about 130 feet wide and not more. I would block that channel with a boom so as to stop the small autumn ice.

From the scientific point of view, as to the damages which might be claimed in consequence of the adoption of the plan which 1 submit, I can say in a positive manner that the water cannot rise or reach more than three feet above the regular level of the river as well for the proprietors as for navigation.

I am going to try to make you understand that my plan cannot retard the opening of navigation. Last year the Lake St. Louis ice came down on the 22nd and 23rd April, and that of Lake St. Francis came down only on the 1st May, 1885, and it is like that every year, and navigation is open only on the 17th of the same month, and navigation opens only when the lights of the lakes are put in place.

The whole undertaking can be carried out for a sum of \$36,000.

CHARLES X LEGER.

Witnesses-N. THIBAULT, E. CHRISTIN.

P. S.—The construction of these piers and booms cannot in any way hinder the free flow of the waters of the Chateauguay River at its mouth. If at any time you desire fuller information I am ready to give you all the information that you want, whether about Vaudreuil or Isle Perrault.

(Translation.)

MONTSEAL, 27th January, 1886.

SIR,—Not having had the advantage the other day of explaining myself in English as I would have liked to have done, I take the liberty to-day of writing you these few words to lay before you humbly my opinion upon the causes of the floods from which you have suffered for a number of years, which may put you in a position to study the question more easily. Now this is my opinion: In the first place you know that for some years past they have been dredging the bottom of the river, and that the earth which is moved finds a resting place somewhere. I, as an old hunter, go to these islands several times every year, and I have remarked that: at the entrance of each channel there is a shoal which obstructs the passage of the Besides that, there is also the ice of the Longueuil eddy which takes and breaks two or three times before the ice bridge finally takes, and this ice, which is seven or eight inches in thickness, when breaking goes off and grounds in large banks at the entrance of each channel or on other shoals, which, according to me, are formed (the shoals) by the earth which is thrown in near the islets below Longueuil, then each channel being blocked and the shoals being also heaped up with ice, according to my opinion these are the causes of the floods, and it is these mountains of ice which stop the flow of the water, and then the rising water causes all these disasters. I conclude, Mr. Chairman, by submitting my opinion to your consideration, as perhaps it will assist you somewhat.

> I am, sir, your obedient servant, JOSEPH JANNARD.

The Chairman of the Floods Committee.

(Translation.)

THE CAUSE OF THE FLOODS.

I consider that the rise of the water is produced by the accumulation of the ice. In autumn fields of ice from Lakes St. Francis and St. Louis come down the river, for it must be remarked that the ice takes more quickly below than above Montreal, and when these ice floes arrive in the neighborhood of Verchères they meet the solid ice, and being forced on by the water they accumulate to the degree of obstructing the passage of the water, which explains the antumn floods. The floods cease as soon as the ice has taken on Lakes St. Francis and St. Louis.

In the spring the flood is produced by the same causes as in the autumn; the ice from below (? above) comes down the river in fields, which are sometimes from 3 to 4 miles long and even more, and when it meets the solid ice, forced on by the water, it accumulates and blocks the passage of the water which is already obstructed by the autumn ice; hence the floods, the water no longer finding a sufficient passage, rises and soon overflows the banks and causes the damage and havod which you know.

Means of preventing the Floods.

Place above the rapids, that is to say at the foot of the lakes, piers from one shore to the other, which should be placed in such a way as not to impede navigation. These piers at the foot of Lakes St. Francis and St. Louis would have the effect of hastening the taking of the ice at these places and would then retain the ice floes coming down, and delay by so much the causes of the autumn floods, and in the spring it would retard the descent of the ice from above and would give time for the ice from below to descend before the ice from above arrived. It is to be understood that if piers were placed in Lake St. Louis only, the same results would probably be had, but the consequence would be the inundation of Beauharnois and neighboring places; but by thus putting piers at the toot of Lake St. Francis there is no fear of floods; and it will be understood that the amount of ice which will come down will be considerably less.

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Moreover, make a canal at St. Lambert 300 feet wide going as far as Longueuil or lower down, giving it all the depth possible while keeping a strong enough fall, and in such a way that the water being let into the canal would exercise a pressure on the ice; and at the head of this canal make a basin of 300 by 600 feet; put twelve gates of 10 feet each in it to communicate with the canal; this basin should be so constructed that there should be no current at this place, it should be dead water in order that the ice may take there earlier than elsewhere, and then that the ice coming down should not enter this basin. In the spring when the time of the breaking up of the ice comes, these gates would be opened, and the water descending this canal as far as Longueuil would go to force the ice on and hasten its departure before the ice from above came down.

The whole humbly submitted.

CYRIAC LABELLE.

363 Workman Street, St. Cunégonde.

To His Worship the Mayer and the Aldermen of the City of Montreal.

The memorial of the Council of the Montreal Board of Trade respectfully showeth:

That the Council of the Montreal Board of Trade having carefully considered the matter of the periodical inundations of the lower districts of the city, desires earnestly to recommend that the civic authorities do, without loss of time, make a vigorous effort to establish the causes of, and find a remedy for, these recurring calamities.

That the importance of the subject is too obvious to render argument necessary, and it is needful only to point out that, as a matter of fact, the river never rises above a certain level without causing a considerable money loss from the destruction or damage to merchandize, while this loss, great as it is, is of less moment than the misery caused to large numbers of people who reside in the district so flooded.

That in addition to these obvious evils, the first effect of the rise of the river being to reverse the flow in all the drains and sewers, all the cellars and streets in these districts are saturated with sewage, and therefore that in parts of the city where no outward effects of the flood are apparent, sewage gas must, as a matter of course, be forced into the dwellings with consequences to the public health which cannot be over-stated.

That the Council of the Board of Trade, while desirous of avoiding all intrusion on the province of the civic authorities, conceives it to be necessary to make a specific statement of the course it is prepared to recommend as follows:-

The enquiry now being conducted by a special committee ought to be continued, the fullest powers be given to such committee, and a liberal appropriation of money made so that the best engineering and professional talent may be engaged to make the necessary surveys.

It should be the duty of those engineers to report fully on the causes of these floods, and to present a specific plan or plans for their prevention, with estimates of outlay. The date at which such report is to be made should be now fixed, though it might

be hereafter extended if requisite.

It is obviously necessary that no time should be lost, as the river in its winter condition can now be examined and surveyed, and, in addition, it is hoped that some steps may at once be found practicable to prevent, or at least to mitigate, the effects of the spring flood which many consider probable.

That the Council of the Board of Trade believes that the civic arthorities will carry with them the approval of the mercantile and manufacturing community, and of the citizens generally, in dealing with this question in a vigorous and liberal epirit.

That it having transpired that the representative of the Board of Trade on the Inundation Committee is absent from the city, the council have this day nominated R. Paton McLea, Esq., in his place, and desires further to say that its members are prepared to aid the proposed enquiry in every way in their power.

The whole respectfully submitted.

GEORGE A. DRUMMOND, President. WILLIAM J. PATTERSON, Secretary.

Signed on behalf of the Council of the Montreal Board of Trade. MONTREAL, 18th January, 1886.

METEOROLOGICAL OBSERVATIONS BY CAPTAIN CHARLES LEGER.

Observations on the changes of the weather, wind and level of the water as noted by Charles Leger at Lachine since the 16th of December, 1884, viz.:

Dec. 16th.—All the rivers were frozen in the morning, the same night very

cold.

Dec. 17th, 18th, 19th and 20th very cold, with north-east wind and snow.

Dec. 21st.—All the rivers were frozen over and people were crossing the same on foot excepting within three miles of the town of Lachine (to Ile Dorval) which is

always open.

On the same day (the 21st) the wind changed to south-west and blew a gale all day and the ice on Lake St. Louis did not budge; the weather kept cold until the 27th; from the 28th until 13th January the weather has been very mild, with a great deal of rain about every other day with winds from the east and south the greatest part of the time, which caused the ice along the Lachine shore up to the Island Dorval to break close up to the beach, the frasilice floated to the surface and moved down the river with the broken ice which caused the water to rise some in Montreal. If the piers were built at Lachine the river would all freeze over from the piers to Ile Dorval and would thus prevent the making of frasil ice and would also keep the ice there, instead of drifting down the river to Montreal and cause a jam and rise of water there.

Every year the ice takes by a cold north east wind, from Beauharnois to Lachine

with the exception of the three miles above mentioned.

Before the year 1875, the four gates of the Lachine lock used to remain open from about the 15th of June till the 15th September, with only about 6 inches of fall

between Beauharnois and Cote St. Paul locks.

Since the building of the new canal dam the water at the head of the pier is one foot higher than it was before. From what information I can gather from the inhabitants should the piers cause the water to rise during the winter season it would. cause no inundation, even 4 feet, in the vicinity of Lachine.

Respectfully submitted by

CHAS. LEGER. Light Pier Keeper, Lachine.

LACHINE, 14th January, 1885.

To the Inundation Committee, Montreal.

MONTREAL, 18th May, 1886.

A. A. STEVENSON, Esq., Chairman Committee on Floods:

This is as near as I can remember the name of the Committee.

A few days ago you were good enough to say you were willing to read a letter. of mine in reference to our annual floods, and how to prevent, or, at least, mitigate them.

In pursuance of that desire, I beg to say that I have had a map of Montreal and vicinity before me for a year, and the more I look at it, the more I feel satisfied that three things, if done, would greatly conduce to this desirable object in view:

1st. Moffatt's Island and the pier thence to St. Lambert shore, should be removed. 2nd. The channel south of the St. Helen's Island should be deepened. I find a correspondent of the Gazette, Mr. Sorby, agrees in a letter he wrote some days ago.

3rd. Isle Ronde should be partly or entirely removed.

By these acts, I would expect to make a direct course for the ice on either side of St. Helen's Island, and thus relieve the pressure upon the wharves.

So much for the city itself. Now, with regard to Point St. Charles, or further up, the difficulty is not so easy to solve, because of the formation of Laprairie Bay.

When the lake ice comes down it naturally pushes towards Laprairie, where we find as it were a large mouth with closed teeth (the piers of Victoria Bridge) holding it back just at the entrance to a comparatively narrow place, thus preventing the larger mass of ice, which is collected at breaking up time. from freely passing down.

The Victoria Bridge I hold to be in a bad spot for our bi-yearly welfare. How-

ever there it is and to stay, therefore we must fight around it for success.

Before closing, I might venture a suggestion or two for what they are worth. That old pier which runs out into the river nearly parallel with Victoria Bridge, ought to be removed or built over so as to point down the river, instead of nearly across, as at present.

And finally taking a jump down to Point aux Trembles and the islands that crowd the channel on the south of Isle St. Thérèse, it occurs to me that the removal of some of them would make a clearer course for the moving ice, and thus greatly

conduce to the end in view.

I don't indulge the idea that I have made any discoveries that are new, and fear that some of my suggestions, if deemed good, would involve too serious an outlay for our purse, but I venture to express my views to show you that I am in deep sympathy with the highly important object for which your committee is organized.

I remain, sir, your obedient servant, R. TURNBULL.

MONTREAL, 29th May, 1841.

Sir,—I have the honor to forward herewith a report, with plans and estimate of the probable expense of relieving St. Ann's suburbs of this city, as far as the levels

permit, from the periodical inundation.

We have as closely as possible adhered to the instructions of His Excellency, and although the members of the commission, as appointed by His Excellency the Governor General, have not been able to meet together lately, yet as the outlines of the plan were agreed on and put in writing at their last meeting, and as from the first there was no difference of opinion as to the principles on which the plan of relief should be founded, we trust that His Excellency will be convinced that the best endeavors of all the members have been used to further the end in view.

I have the honor to be, sir, your most obedient humble servant, P. COLE, Major Royal Engineers.

T. W. C. MURDOOK, Esq., Civil Secretary, &c., &c.

REPORT ON THE CAUSES OF THE PERIODICAL INUNDATION OF PART OF THE CITY OF MONTREAL CALLED GRIFFINTOWN OR ST. ANN'S SUBURRS, ON THE POSSIBILITY OF REMOVING THOSE CAUSES OR OF OBVIATING THEIR EFFECTS.

Montreal, 29th May, 1841.

In pursuance of the commands of His Excellency the Governor General as conveyed in the Civil Secretary's letter of the 15th January last, relative to the periodical inundations in the St. Ann's suburbs of this city, the commission appointed by His Excellency have the honor to submit the result of their enquiries and examinations, with plans, sections and estimate founded thereon of the probable expense of protecting the city from this calamity.

The subject naturally divides itself into several principal sections.

Division of the Subject.

1. The rise of water in Montreal harbor at the end of December, or beginning of January of each year, and on the breaking up of the ice in the spring.

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The natural and artificial causes leading towards this result, and the consequent flooding of Griffintown.

The possibility of removing those causes or of obviating their effects.

Rise of St. Pierre River.

2. The rise of water in St. Pierre River and its effects on the inundation of the city and neighborhood with the means of preventing the evil.

Sewers and Drains.

3. The sewers, drains and their course by which the backwater of the St. Lawrence is admitted into the city before the overflow of the banks and upper quays.

Streams within the City.

4. The small streams which usually fall into the St. Lawrence within the precincts of the city, and the means of guarding against their overflow when the usual course is stopped during the inundation.

Rise in Harbor.

First. The rise of water in the harbor is obviously caused by the accumulations of ice from the rapids above, which, being stopped by the field ice below, is forced under it from the pressure above until it grounds on the shoals in and below the harbor, and being confined by the narrow channels on each side of the island of St. Helen, forms a succession of dams as far as the head of the island and the new market, from whence the inundation was on a level this winter as far as the canal; and from the information we have obtained it appears that the deviation in other years is not material.

The great body of ice in the centre of the river, when arrested in its course, shoves not only downwards but sideways towards the shores, and even backwards when out of the current, as below Windmill Point.

Ice Dams.

It then grounds, shoals and forms accumulations which, in some instances, have done damage to the houses along the quays.

The accumulations on the shoals and wharves at and above the new market being nearly parallel to the shore, do not, in our opinion, materially affect the rise of water in the river.

The communications from intelligent and observing residents who have favored us by their written or personal communications, show that the accumulations vary in extent and situation. That the relative height of water in different years corresponds with the alternations of trost and thaw before the ice becomes fixed, and that, when the frost is very steady at this period, a comparatively small rise of water may be expected, probably from the small quantity of floating ice which comes down the river.

Causes of unequal rise of Water in different Years.

It is also generally observed that when the ice passes down the east channel without choking or "shoving" that there is no excessive rise of water in the harbor, and also that if this channel be choked, as well as the western one, that the greatest rise is to be apprehended, as was the case this winter, the "air hole" or vent being below St. Helen's.

Effect of the Wharves on the Inundation.

These facts, connected with the parallel situation of the accumulations to the shore and the uniform level of the inundation above the new market, apparently prove that the wharves have no effect on the inundation. The proportion to the breadth of the river is very trifling.

Rise in Former Years.

This view is corroborated by several intelligent correspondents, who vouch from personal observation that the water has risen to a greater height before these improvements were made, and, in particular, about 50 years ago, when the water covered the whole of the southern part of St. Paul Street. Several years after this, the lower floors of the Grey Nunnery were inundated to a great depth. In the winter of 1809-10 the water rose high enough to float timber over Grey Nun Street.

In later years the greatest rise was that of 1837-35, when the water rose about one foot higher than the present year. That in 1839-40, although higher than usual,

was two feet lower than that of this year.

Duration of Flood.

The duration of the highest winter flood varies. It generally does not exceed two days, as was the case this year, and the preceding, but in 1837-38, which was a very mild winter, the flood was very high, though perhaps not at its highest, during 14 days. Some relief may however be expected in less than 24 hours. The city is always more or less affected by it, in the cellars for several weeks.

Height of Flood above Lowest Water.

The greatest flood is about 20 feet above summer level in the harbor, and about 12 feet difference at St. Mary's rapid between two periods at that place.

Spring Flood.

The spring flood is lower and of less duration as the ice is then unequal to support a great head of water, but from the great body of floating ice more damage has been occasioned by the latter to the houses bordering the quays at this season than by the water.

The most remarkable effect of ice was in 1792 or '93, and in 1832 the water rose

to the height of the present quay wall.

The temperature has also an effect on the spring flood, and southerly winds by detaching large portions of ice, increase the accumulations or the flood by the accompanying rain.

If the river is open at the current St. Mary, the rise of water is not to be dreaded

in the spring.

From the foregoing facts and the levels taken for the commissioners, and from the coincidence of the accumulations with the narrows and shoals at and below the head of the island and the new market, we are of opinion that the obstructions affecting the inundation commence at those points, and continue downwards on both sides of the island until the river opens below it.

As before stated, there is no very high flood if the channel is open on either side of St. Helen's, which appears to prove that there is always a passage below

sufficient to relieve the town.

St. Pierre River.

Secondly,—Dams of ice similar to those before mentioned are formed above the harbor, and in the channel inside of Nun's Island, which raise the water above them and back it up to the St. Pierre River until it overflows its banks, when it flows in a rapid stream downwards on the east side of the canal, and through the culvert at St. Gabriel's farm to the west side. This rise is simultaneous with that of the back water in the harbor, and meets the latter flowing southwards about the St. Gabriel's farm. Its level is about two feet above the harbor backwater, and has therefore much increased the mischief caused by the inundation. It has flowed over the canal bank in several years, and in 1837-8 to a depth of 4½ inches, and probably caused the very great flood of that year in Griffintown.

The backwater did not, in the present year, flow up the St. Pierre, beyond the culvert under the level near Mr. Gregory's. Should it do so in other years, it would

be diverted on that side from the city by a ridge running from Mr. Gregory's westwards across the upper Lachine road to the Côte. This is the dividing ridge between the water of the Holwell Creek and that of the rivulet, flowing through the Tanneries to St. Pierre.

It has been proposed to embank the St. Pierre, to prevent its overflowing on the east side of canal, but this work, by preventing the relief afforded by the overflow, might back up the water to a greater height along the banks of the St. Lawrence above the St. Pierre, and up the valley of the latter.

As the farms on the east of canal are not injured by the inundation, and do not come within our instructions, we avoid tampering with the natural course of the

Drains and Sewers, &c.

Thirdly. The backwater rises in the cellars of the houses within its sphere, nearly as fast as in the harbor, through the St. Ann's Creek and other drains, and also by quicksands or gravel below the level of the quay wall. The remedies we shall afterwards submit.

Quicksands.

The influence of the quicksand is probably much less than is generally supposed. If it cannot be cut off, it will at least require small means to carry it off.

Streams within the City,

Fourthly. The streams falling into the St. Lawrence, within the precincts of the city, contribute to the inundation, and the mode of remedy requires consideration.

Holwell Creek.

The Holwell Creek is merely the drain of a marsh, on the west of Upper Lachine road, as far as the ridge before mentioned on the city side of the Tanneries. It is joined near the brewery of Messrs Dow & Dow by an offset from the St. Pierre, passing through the St. Gabriel culvert.

The latter stream can be confined to the east side of canal during an inundation.

The Holwell Creek discharges at Point à Callière.

Mountain Streams.

There is another stream which descends from the Cote à Barron and crosses Bleury Street near the upper end. On arriving at a swamp at the head of St. Lawrence suburb, it passes by a water course into the Craig Street tunnel, which meets the Holwell creek before its discharge at Point à Callière. This stream will be hereafter adverted to.

Remedial Plans Proposed by Individuals.

Several plans have been proposed by individuals for prevention of the rise of water in the harbor.

Excavation in the bed of the River.

The most obvious remedy is to deepen the shoals in the west channel, and to lower the small island at the foot of St. Helens to about three feet below summer level. The expense attending this plan would by very great, the effect uncertain, as it would afford very little additional relief to the channel which is 37 feet deep at low water. The effect anticipated is that it would afford scope for the escape of the ice below without forming dams.

In the summer it would have the injurious effect of lowering the water in the harbor, but, on the other hand, it would diminish the rapid of St. Mary by lowering

the head, and allowing the water to spread.

Another objection to this plan is that it would require several seasons to complete it. Although it is not recommended by the commissioners for the present time and

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purpose it may deserve attention at a future time, as an auxiliary means of relief, keeping always in view the effect it would have on the harbor. The shoals above the head of the current St. Mary may be removed without risk.

Proposed Mole and its Probable Effects.

It has been proposed and supported by several persons whose opinions are worthy of the greatest consideration, that a mole should be thrown out, either continuous or in detached piers, from Windmill Point on the shoals towards St. Helen's

or from a point higher up the river.

Two effects are anticipated by the movers of this plan. First, that by creating dead water above it, the ice would take sooner and arrest the floating ice at a higher level and thus prevent the formation of ice dams below the harbor. Secondly, that if the mole were formed in piers, it would break the ice in small pieces, which it is expected would not form into accumulations.

The first expectation is, however, problematical, and the second superfluous, because the greater part of the ice is broken small by the rapids, particularly that which comes down immediately before the ice is fixed, and which is equally arrested

by the ice below.

It was at first overlooked that the mole, if continuous would occupy about onethird of the breadth of the river, and then the water thus backed up would very much increase the rapidity of the steamboat channel in the summer, and the only

bateau channel would be blocked up.

At the commencement of the winter, the ice would be arrested, either in fields or masses, above the mole and would flood lands above the rapids which are now exempt. The water which in some seasons has flowed over the canal a few inches in depth would then be precipitated over in a torrent unless the banks were raised to a height which we cannot estimate, and would create evils far more fearful than those it is proposed to avoid.

Effects of Proposed Mole.

If, instead of a continuous mole, piers were placed at intervals, the evils to be dreaded would certainly occur in proportion to the shortness of the intervals, but it

is not so certain that the good effects anticipated would actually ensue.

The Commission do not therefore propose any work of this kind, but it may be a matter of future consideration as an auxiliary plan, whether a few piers may not be placed at a time, to ascertain the effect produced, and allowing several winters to elapse before further additions were made, to give a full trial of the effect.

We feel ourselves called on to dwell on the necessity of the greatest caution in

attempting to cope with, or even to direct so powerful an agent.

The conflicting opinions which have been brought forward with respect to the remedy for this evil show that the subject is involved in considerable difficulty. It is indeed of a more than usually complicated nature.

COTE DES NEIGES, MONTREAL, 25th January, 1886.

To the Chairman of the Inundation Committee:

SIR,—I have the honor to forward you a printed copy of my letter, sent to the Montreal Herald on Friday last. Should you desire the plans and estimated cost of improvements, there described, I shall be pleased to prepare same for your perusal. The cost would be only very trifling.

Yours truly,

F. G. GILMAN.

HOW TO STOP THE INUNDATIONS.

To the Editor of the Herald:

Sir,—On the 13th of April I wrote to the newspapers in reference to these floods, pointing out the means employed near Penzance, in Cornwall, England, to

prevent the sea overflowing some 500 acres of land that is 8 feet below high water mark. I have myself seen storm waves run 20 feet high up the dyke without any

water coming up the trapped culvert.

I have since studied this matter and find that the floods are caused by an ice bridge first taken below the city when the water is low and comparatively still. Then when a thaw in the west causes a vastly increased volume of water to come down the St. Lawrence, the softer weather, coupled with the accelerated force derived from falling down the rapids, breaks up the thin ice near Victoria Bridge. This increased volume of water cannot escape under the ice bridge previously formed below the city, as it is firmly frozen at the lower levels, until it has lifted the whole surface, which it does gradually beginning at the upper end, the floating ice passing under same and gradually raising the whole sheet. This, in my opinion, would account for a spring flood.

A winter flood is from a combination of causes. The ice that has, owing to a thaw, passed under and commenced to raise the upper end of the bridge becomes frozen, making an effectual trap to catch and retain all frasil that floats down. By this means the barrier is increased and the water channel contracted until the flood has risen until the water is of sufficient weight to break the barrier through.

Now, sir, for the remedy. I have one that will put an end to these floods, that will make your mighty river keep its bounds for ever, and will cost the city com-

paratively nothing.

Some gentlemen have advised building piers above the rapids, but it is the ice from below the rapids that first causes the trouble. The impetus given the water by the fall prevents said ice forming so thick as that lower down the river. Other gentlemen advise removing certain shoals, Isle Ronde, &c.

Now, sir, if this were done what depth of water would you have in the ship's channel during summer shallows? But the gentleman who suggested removing St. Helen's Island, could perhaps devise means to replace it by the opening of navigation.

In my opinion every sewer will have to be run into the Craig Street tunnel. A separate tunnel could be made to run parallel with the river, a few feet inside the revetment wall, and by this means drain Griffintown, Point St. Charles, &c., in fact all sewers that now empty into the St. Lawrence, said tunnel to be connected at the lower end with the existing Craig Street tunnel and the whole carried to a point below the ice barrier previously referred to

It has been proved that the waters do not rise high a few miles below the city, so if the sewers emptied there it would be impossible for flood waters to back up

into any store, street, or even cellar.

Then the revetment wall would have to be rebuilt (it wants doing anyways) and raised three feet higher; the whole foot path might be raised, making a wall twelve feet wide, and so protected on the river side that people will not break their necks falling over it. The wall would need raising from Bonsecours market west, and continued up the bank of the river for about a mile above the bridge with an earthern embankment, the earth for which purpose could be brought on tramways from near the aqueduct and also partly from the dredgings of the river.

Now for the means. If instead of keeping prisoners idle, or, what is worse, employing prison labor to make cheap though comparatively useless articles, tin trinkets, &c., and thereby injuring the trade of the city, they were employed in constructing such works as the above, it would confer an immense benefit upon the honest poor who are now flooded out, and cost, as I said before, comparatively

nothing.

In foreign countries work of this kind is done by prisoners. In France, I have read, the cornice road from Marseilles to Genoa, some 160 miles, built through rock the greatest part of the way, was done almost entirely by prisoners from Toulon under the first Napoleon. In England I have myself many times seen a gang of prisoners at work building the Weymouth breakwater. It is an immense structure, about five miles long, and would cost many millions of pounds, but for utilising that which is in Montreal a "latent power."

146 St. James Street, Montreal, 19th January, 1886.

SIR,—At the request of Mr. George Drummond, I beg to lay before you some points in connection with my scheme for relieving the city from floods, which was published in the *Star* last week. These points are as follows:—

Firstly.—The still water harbor mentioned as being possible after our drains had been all diverted into the Craig Street tunnel, was only referred to as an improvement which might be carried out; it forms no part of the project for avoiding the

floods.

Secondly.—The extension of the Craig Street tunnel down to the Ruisseau Migeon is in any case very desirable, for during very high water the drainage has no proper outlet, but keeps floating about under the city with the water in the river, and not only generating gases which must be very injurious to the health of the city, but also depositing large quantities of solid matter in the drains.

Thirdly. - If the drainage of St. Gabriel was all brought under the canal to join the extension of Craig Street tunnel, a splendid opportunity would be afforded of flush-

ing the tunnel with water from the canal.

Fourthly.—The extension of the Craig Street tunnel will be required at no very

distant date in any case.

Fifthly.—After diverting the drains from the harbor, we should have no more

complaints about the polluted water along the river tront.

Sixthly.—From remarks I have heard, I would wish to explain how I propose to deal with the drainage during floods. I propose, when necessary, to shut off the connections between the main drain and the river at the Ruisseau Migeon, and either pump it over the sluices into the river through a long pipe supported by stays, or through a pipe carried along the bed of the river to some point out of the way of navigation, and protected at its extremity with a crib-work, or else let the drainage flow into a reservoir during the floods, and let it flow out when the water falls sufficiently; on these last points I have no data which would enable me to form an opinion as to which would be the best method.

Seventhly.—The cost of the scheme I propose can be definitely ascertained, and its success is certain, whereas in dealing with the river, unless St. Helen's Island be removed, which is quite out of the question, no one can tell what the success would be; under certain conditions a flood could be avoided, but under others the water is

certain to rise.

Eighthly.—To raise the level of the streets would only give a small measure of relief, as the cellars and yards would still have to be filled and the houses raised—it being remembered that cellars are very necessary to store provisions in.

Ninthly.—Since writing to Mr. Drummond, I have seen the report of the Royal Engineers on the question at issue, and, taking into consideration the changes in the

city, their proposal seems almost the same as mine.

Tenthly.—The scheme I propose would not only relieve the city from floods, but

also give a perfect system of drainage.

Finally.—I wrote the letter published in the Star simply as a citizen who has

an interest in the welfare of the city of Montreal.

I have not as has been estimated any "axe to grind" in the matter, as I have not yet found surveying in Montreal sufficiently profitable to be able to invest in flooded cellars in St. Paul Street, nor do I expect to derive any professional benefit from my scheme, as the works, if carried out, would be under control of the city surveyor; and, in fact, any investigation into the condition of the river would be more likely to be profitable, as Mr. Rielle might be called on to furnish a copy of the large plan which he has of the River St. Lawrence on a scale of 200 feet to the inch, and which comprises that part of the river lying between Lachine and the Boucherville Islands, showing the contours of the ground, the level of the water at various points, and well established bench marks along each side.

Your obedient servant,

H. IRWIN.

146 St. James Street, 4th February, 1886.

SIR,—Allow me to call your attention to one point in the published account of

Mr. St. George's report, which, I think, requires explanation.

Mr. St. George cites the fact that the Worthington engine can only deliver
8.000,000 gallons per day, as proof of the impracticability of pumping the sewerage

in time of fl ods.

Mr. St. George seems to have overlooked the fact that the 8,000,000 gallons are to be raised some 200 feet, whereas the sewerage at the Ruisseau Migeon outlet would only have to be lifted some 16 feet.

It follows from this that an engine of the same horse power as the Worthington

could deal with 100,000,000 gallons of sewerage at the point stated above.

Besides an engine could, owing to improvements, be now bought at the same price as the Worthington, we should have an engine able to pump 125,000,000 gal-

lons per 24 hours.

Again, the Worthington type is by no means the most suitable for low lifts. In the Scientific American supplement for 9th August, 1884, you will see an account of a centrifugal pump (for emptying the caissons of a floating dock), which has a capacity of some 208,800,000 gallons for 24 hours.

With regard to the water from the upper part of the city, I had no idea that it discharged into the Craig Street tunnel. I was under the impression that it was conducted along a higher level drain, and emptied into the Colborne Avenue tunnel.

In this, as in most other matters relating to the scheme I proposed, I could propose no details, as I am unable to get at the necessary data. Surely no same engineer would propose to pump the drainage of the higher parts of the city into the river.

It Mr. St. George would inform Messrs. R. H. Buchanan & Co. of the quantity of water to be pumped per 24 hours, and the height to which it would have to be raised, I have no doubt they would give you an approximate tender on very short

notice.

I do not propose to trouble you any more on this subject, as I think I have succeeded in turning the attention of the authorities from the idea of dealing with the river to the more practicable and less costly scheme of keeping the water out of the sewers and raising the banks where necessary.

This was the object I had in view in writing my letter of 12th January last.

Your obedient servant,

H. IRWIN.

ALDERMAN STEVENSON, Chairman Inundation Committee.

OVID M. GOULD, Esq., testified as follows:-

I called here to draw the attention of the Committee to the fact that the City Surveyor has been taking levels of the river, and in conversation with him he stated that he was not authorized to make a very extensive survey.

The levels which have been already taken go to show that the dam which causes the flooding of the city now seems to be located somewhere between Isle

Ronde and Victoria Bridge.

I suggested to the City Surveyor that it might be possible to blow it up with

dynamite as an experiment which might not be so costly after all.

I would suggest that this Committee recommend to Council that the City Surveyor be authorized to make a more extensive survey, and if, after such survey, in his opinion it should seem feasible to blow up the ice jam with dynamite, or any explosive, as an experiment, that he be instructed to make the attempt, and so ascertain if the obstructions could not be removed.

I think that the flooding of Point St. Charles was caused by the water backing

up through the sewers.

Ex-Alderman Tansey appeared before the Committee and testified as follows:—
On William and Kennedy Streets, I remember that in 1847, the water rose to a certain height, and I was compelled to drive in a cart to go to school. This winter I know that the very house in which I lived in 1847, is flooded to a height never attained during the time I occupied it, on account of the raising of the streets in that locality. This shows clearly that the water rose to a higher point now than it did in those times, but the raising of the streets showed it only six inches in some places where it was three feet in those days. I am of opinion that the streets of St. Ann's Ward should be raised. It would cost a great deal to raise the level of the streets, and it would be a step in the right direction towards mitigating the frequent occurrence of the floods; scrapings from the streets of the city and stone taken from the excavation for the laying of water pipes in St. Jean Baptiste Ward could be used to do this work, and tenants could be requested to keep their cinders apart and the same could be used for that purpose.

The revetment wall is tumbling down and some repairs should be made to it;—water above McGee's bridge is twelve feet higher than the level of Point St. Charles, and we are not flooded from it, for the simple reason that the embankment is sufficiently strong and high to prevent the water from overflowing the bank. And now, for a remedy against the frequent floods at Point St. Charles. I would suggest that the present bank of the tail race on the north east side be raised at least three feet, commencing at the wheel house, thence to the river, and then extend it to Victoria Bridge and from there to Mill Street, and then place a sluice gate at the outlet of the tunnel at that point which could be regulated to close or open by the rise or fall of the water, then to place a pumping engine or a turbine wheel to pump the sewage over into the bank into the river if necessary. The same plan could be adopted for

the other outlets in the city.

The Harbor Commissioners should raise the revetment wall from Black's bridge, to the Canadian Pacific Railway depot or thereabouts.

Alderman Laurent: If the streets are raised, will not the proprietors claim

damages?

In answer to this question, I say that, as far as I am concerned, personally, I shall not claim damages, and I would prefer to step out on a macadamized street

than to have to step into the water.

I would further recommend that the levels of the water at present be taken, and that the streets should be raised according to the present level of the water only.. By doing so there could be very few houses that would require to be raised; some could be raised bodily, and more could be raised by placing an extra joist of 10 or 12 inches on the first floor.

I would recommend also legislation to protect the city against damages caused in consequence of the raising of the streets, also to exempt proprietors and others

from any expense in consequence thereby.

I am of opinion that prompt action should at once be taken; I do not approve of any expense for surveys being made, as I consider that the corporation possesses sufficient engineering skill to carry out the scheme as far as the city is concerned.

D. TANSEY.

Point St. Charles.

Mr. THOMAS WEBB, of the city of Montreal, testified as follows: ---

I have resided in St. Ann's Ward for over thirty years; we have had water almost during the whole of that period. There have been numbers of plans got up to prevent the rise of water in that ward, but they never succeeded so far. I took the trouble of visiting this year's flood, being well acquainted with every inch of the flooded district, and I saw that a great improvement had been made by raising the streets. When I was a toy, I lived near William, where I saw eight feet of water various times; this year I find quite dry and free of water. In the premises that I occupied, with this year's flood we would have had about $4\frac{1}{2}$ feet. At present there are but 10 inches in the premises.

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Our city drains into the river; therefore, the water returns by the same way it

goes. Anchor ice gets in under the ice, and chokes up the channel.

If you have a survey of the river made between Montreal and Bout de l'Ile, you will find that there are three different levels. There are large shoals opposite the Hudon cotton factory, and anchor ice generally settles there.

If Isle Ronde were removed, as has been suggested, Longueuil would undoubted-

ly greatly suffer by it.

Our first trouble commences at Bout de L'Ile. If the river is low in the fall, we are sure of high water, as the river here is encumbered with small islands, and the channel is crocked. Three nights' frost causes the ice to form sufficiently strong to cross; then the drift ice commences to choke the stream; then at Longue Pointe another rise by the anchor ice at the Hudon cotton factory by the long shoals, causes the water to overflow the city. To remove the islands, Isle Ronde and St. Helen would do no good. They talk of abutments of use in the river; there were 4 or 5 built where the bridge crosses, by the advice of some engineers, to retain the ice in the Laprairie Bay. They proved to be an expense and for no purpose, so they were broken up and carried away by the ice; that proved their great service.

I would say, remove those small islands below Boucherville Island, that would give more room to form a greater passage and prevent the choke here; then if the river is high in the fall we are not in so much danger of being troubled, as the very

passage is increased thereby.

THOMAS WEBB.

196 St. Antoine Street.

COTE DES NEIGES, MONTREAL, 20th January, 1886.

ALDERMAN STEVENSON.

SIR,—I understood that a meeting of the Inundation Committee would be held

in the City Hall on Tuesday last at 3 p.m.

Under that impression I wrote the letter left at your house on Tuesday night, intended to have read same myself, and made certain corrections that it seemed unnecessary to write down. The most pertinent that occurs to me just now is after the words "Craig Street tunnel" I should have said: A separate tunnel could be made to run parallel with the river a few feet inside the revetment wall, and by this means drain Point St. Charles, Griffintown, &c., in fact, all sewers that now empty into the St. Lawrence—said tunnel to be connected at the lower end with the existing Craig Street tunnel, and the whole carried to a point below the ice barrier previously referred to.

Yours truly,

F. G. GILMAN.

GUARDING AGAINST FLOODS.

MONTREAL, 28th April, 1885.

To the Editor of the Herald:

Sir,—Surely it is possible in future to prevent the disastrous floods in the low-

lying parts of this city

Near Penzance, England, there is a tract of land, some 500 acres in extent close to the sea, that is never flooded, although it is some 8 feet below high tide, a reservoir of about an acre holds all the surface water from this land; it is separated from the sea by a high bank; at low tide the water is drained off by two culverts, about 2 feet in diameter; each culvert is laid in coment and slightly sloped at the mouth; a piece of leather, strengthened on the outer side by sheet iron, is hung over said mouth of culvert forming a valve which effectually prevents any water returning, no matter how high and rough the sea. These drains are very simple, would last many years, and ought not to cost more than one flood does.

Yours truly,

F. G. GILMAN.

INUNDATION MATTERS.

To the Editor of the Herald:

I am gratified to learn through your columns that the city fathers are beginning to see the utility of my scheme for preventing the inundations. On the 13th of April last I wrote describing the means adopted to prevent inundations in other countries. On 18th January I forwarded supplements of same to the chairman of the Inundation Committee, a copy of which appeared in your issue of 25th January, suggesting that, as the floods were caused by an ice barrier forming below the city, it was advisable to rebuild the revetment wall or put another wall on the river side of same, commencing the foundation say ten feet outside the existing wall, and sloping the new wall inwards, so that it would come within six feet of the whole wall at the top of the same, the space between walls to be cemented with puddled clay; the new wall could be raised three or four feet higher than the old one, with ridged coping stones at the top of the same, coming to a sharp edge to prevent children walking on top. There would then be a protection for pedestrians in winter as well as summer. This sloping wall would have a tendency to raise the ice when shoving against it, and so relieve said wall of part of the pressure.

I further suggest that a new tunnel should be made to run parallel with the river, intercepting all present outlets, running from Point St. Charles along the centre of Mill Street, under the canal above the first lock, along Common and Commissioner Streets, joining the Craig Street tunnel at the lower end, and the whole to

be carried to a point below St. Mary's current.

We should then require no pumping engines, as if the tunnel were carried far out into the deep water, it would be impossible for ice to clog it, and the "fall" through Hochelaga is sufficient to clear it at all times, thus saving an annual expense in attendance, fuel and repairs of a very large amount. Also that an earthern embankment be continued from the end of the revetment wall to all points from which the river has been known to flood the city, probably as high up as the River St. Pierre.

I have not been to any meetings of the Inundation Committee myself since Saturday week, as my prediction that the natural heat of the soil, acting on the proposed frezen sawdust bank, would allow the water to get underneath and float it away unless it was bolted down and clinched somewhere on the other side of the world, apparently gave offence.

In conclusion, I must apologize for not answering "Probs'" letter that appeared in your columns one day last week. I have not seen the paper he refers to. How-

ever, I seldom pay any attention to letters unless signed by the author.

Yours truly, F. G. GILMAN.

773 Craig Street, 8th February, 1886.

128 PRINCE STREET, CITY, 16th January, 1886.

To the Special Committee on Inundations:

GENTLEMEN,—In the Star of 15th January you invite schemes or suggestions to relieve the city from the floods; and as I believe they can be effectually prevented I respectfully append herewith my ideas on the subject, which, if adopted, will prevent floods:

First. Take the level of the river as required for business purposes in the summer time. Then take the highest level the ice reaches in flood time—both levels between the town and St. Helen's Island. Next get a chart of the river bottom between the town and St. Helen's Island. You will then be able to join an estimate as to the extra amount of space required to allow the water to pass without jamming a block at flood time. You can then get space required for the flow of water by either deepening the river, taking away St. Helen's Island altogether, or only so much of it as would be requisite for the flood water. Removing part or all of St.

Helen's Island would be the least expensive, as you could employ prison labor for the greater part of the work.

I am, gentlemen, yours respectfully,

JOHN ARCHER.

GEOGRAPHICAL SOCIETY, QUEBEC, 27th March, 1886.

To the Editor of The Star.

SIR,—I wish to draw your attention to the state of the waters of the St. Lawrence, which enables mariners to sail from the Louise Dock, Quebec, to Cape Ray, Newfoundland, and so pass into the ocean. The Gulf of St. Lawrence is always navigable in spring until the bay ice gets into the current, and so blocks its entrance with field ice; between Cape Ray and Bird Rocks this generally occurs at the end of April, but never in March.

The point, however, interesting to us in April is the ice blockade in the river between Quebec and Montreal, especially as it is believed, with our knowledge of modern science, it ought not to exist, and if not removable it is any rate preventable.

My argument consists in my knowledge of the element of water, its power to receive heat and to receive cold. The temperature of the river to-day is 34 degrees, 2 degrees above freezing; this is not the case with the land or the ice, they assimilate nearer the temperature of the air, which is frequently very cold, and in March, except when the sun is shining, rarely at a temperature of 34 degrees.

These facts being correct, we have to attribute this early navigation to the river having been kept kept clear of ice during the winter, and its preparation to receive

solar heat early in March.

A shaft of water, at a temperature above freezing, being pushed and worked up and down by the tide, has an effect on the air, as the vapors can be both seen and felt, especially when this mass of water extends 100 miles inland, as is the case to-day.

The navigators of the Upper St. Lawrence ought to combine in winter, and, by the use of modern mechanical science, keep the navigation open by attacking the ice, where it can be done successfully, such as Point Lévis, the Chaudière, Point au Platon, the Lake, and so on, and prevent the ice blockades and subsequent spring inundations. A Dundee whaler could now, with the help of steam saws and dynamite, work its way through Lake St. Peter to Sorel, and so start by the use of the steamboat wave all the ice which Providence is going to send down in a few weeks—Aide toi et Dieu t'aidera.

I need not add, with open waters at Sorel in March, the men of Montreal will not retain their present honorable position in progressive science, if they cannot find some means of removing the impediments to their trade, and the evils of high waters

to their city.

Get open waters both in Lake St. Francis and Lake St. Peter, and near as you can to Montreal, and the larger their volume the better, then feel assured two degrees above freezing will tell its tale, the night frosts will be diminished, whilst the day thaws will be increased, and your ice will rapidly disappear in the direction of Quebec, where it will be converted into water.

Remember thirty-four degrees is above freezing, and all that latent heat is covered up with ice in Lake St. Peter, and so protected from the sun's rays and all

contact with the air, consequently causing delays and late navigation.

The captain of the "Alert" can do this service as easily as navigating Hudson Bay, if he was ordered to report in Montreal, and Canada would gain by having open ports in April instead of in May.

I enclose the Signal Service Report for 25th March, 1886, and

I have the honor to be, sir, your obedient servant,

W. RHODES, Vice President Quebec Geographical Society.

SIGNAL SERVICE REPORT.

QUEBEC, 25th March, 1886.

Cape Rosier—Thermometer 31. Dull and cloudy; variable winds; heavy open

ice everywhere, moving north-east.

Manicouagan—Dull and variable; no ice. Inward at 7 am. yesterday at Moisie, one schooner. Mail courier arrived 23rd, p.m.; reports shore ice from Point Esquimaux to Point des Monts broken up and Gulf clear.

Point des Monts-Dull and variable; no ice.

Anticosti—Thermometer 30. Light unsettled weather, with variable winds. South channel—No ice. North channel—Light close-packed ice in shore South-west Point—Outward at 6 a.m., schooner "Java," several scaling schooners about island; schooner "Campbell" fitting out at English Bay for scaling.

Meat Cove Dull; strong north wind; ice extends four miles off clear water

outside.

Cape Ray—Clear and fine; light north-west winds; no ice. A schooner arrived this a.m. from the Gulf, with 1,100 seals.

QUEBEC, 21st April, 1886.

To the Editor of the Quebec Mercury:

SIB.—The conditions of the river in the harbor of Quebec have been so entirely satisfactory for the last menth that I do not think they can be much improved. The grand battle against the floating ice by three steamboats during the winter has been so eminently successful, it will, no doubt, be renewed every year; and, though the steamboats lost screws and received other injuries, yet they demonstrated the fact that ice has to yield to superior force when guided by modern skill. In the St. Lawrence there appears to be two "points" between Quebec and Montreal, where the ice may jam in such a way as to become a public injury, viz., at the Chaudière and at Boucherville.

The Chaudière did not bridge this year, no doubt from want of material; as from the ice being kept in movement by the seven hours of falling tide, against the inflow of four hours, it would reduce the quantity of ice to pass through the narrows.

The formation of a bridge at the Chaudière is always uncertain; the nature of ice is to disperse and separate, to melt, but not to adhere; it is constantly trying to return to the condition of water and to flow instead of becoming solid. When an ice jam does form at the Chaudière it becomes so solid (twenty feet in thickness) that it only yields by melting and by the pressure of the lake ice. The effect of no bridge at Lévis and none at the Chaudière, was probably the breaking away of the Platon bridge, and consequently navigable water up to Three Rivers.

The Chaudière bridge can be prevented as easily as the Lévis, as it is the upper portion of the same water, and can be kept clear by the ordinary ferry boats,

especially if directed to do so by the Harbor Commissioners of Quebec.

There appears to be a good deal of similarity in the history of these two ice jams, the Chaudière and the Boucherville, and I have little doubt a like treatment would lead to the same result which we claim at Quebec, of a better state of affairs; but the commencement must be made for Montreal at the point of the river where navigation ceased this winter, viz., at Three Rivers, and a passage or lane of water kept clear to the mouth of the Richelieu (Sorel). These water spaces are found in the Arctic seas, would follow the line of the current through Lake St. Peter, depending upon the flow of the water through the lake to keep the young ice running; in fact, run a ferry boat between Three Rivers and Sorel.

This year the breaking up of the ice on Lake St. Peter immediately relieved the inundation of Montreal; so it would appear if this had been artificially done. Montreal would have been saved a great misfortune. I would recommend Mayor Beaugrand to ascertain who is responsible for the navigation of the St. Lawrence, and if due

diligence has not been used to sue that department for a million dollars (this would no doubt bring on to the Public Estimates \$50,000, for the further improvement of the St. Lawrence) or to show cause why it is a dispensation of Providence and no-body is responsible.

In a previous letter (27th March) I have shown that the removal of ice from the surface of the water admits the rays of the sun, and heightens its temperature. This is to-day practically the case, as water coming into our harbor from the west shows a steady temperature of 34 degrees, whilst water coming from the east varies from

34 to 36 degrees.

The climatic effect is that we are sowing our gardens in Quebec on the 20th April, whilst for the last 49 years I have never been able to do anything before the 26th or 29th of April; our cows are also in the field, getting a half meal, and vegetation is far advanced.

The whole of this subject is of such national importance and of so great scientific interest, and by geographers, we shall become like Arctic navigators, surprised at our own want of courage, and at the facility with which we have abandoned to Providence an apparent impossibility.

I believe Providence does not expect us to wait until the sun removes the ice from our harbors, and I do not think Montreal will submit to be the last ice blockaded port on this continent. Even Hudson Bay hopes to compete with the St. Lawrence, and she will do so if she can solve the ice question.

I have the honor to be, sir, your obedient servant, W. RHODES, Vice President Quebec Geographical Society.

TEMPERATURE of the water of the St. Lawrence, opposite Quebec-Continued-1886

April	9	Falling	tide at	2,00	p.m	320
ďo	10	do	do	2.30	***************************************	
do	12	do	do	2.30	*************************	32°
do	13	Rising	do	11.30	*************************	36°
фo	13	Falling	do	5.00		34°
do	14	Rising	do	noon	************	360
do		Falling	do	5.00	P0000000000000000000000000000000000000	34°
do	15	Rising	do	1.30	********	340
do	16	Falling	do	8.00	a.m	34°
do	16	do	do	7.30	***************	
do	17	Rising	do	3.30	p.m	
do	19	Falling	do	8.15	***************************************	35°

Since the last return only two observations have been taken to establish the temperature of the ice in the Louise Basin. The result has given 32° in each case, the dates being the 9th and 10th of April. The ice is broken since the last date.

To Colonel Rhodes, with Mr. Verret's compliments.

SIGNAL SERVICE REPORT.

Quebec, 21st April, 1886.

Cape Rosier—Thermometer, 41°; hezy, light north-east wind; no ice.

Anticosti—Thermometer, 40°; cloudy and calm; no ice. The steamer "Titania"
in the same condition as last fall, uninjured by ice.

Cape Despair-Dull, north-west wind; no ice.

Point Maquereau-Cloudy and warm; light west wind; no ice.

Point Escuminac-Clear and fine; light west wind; heavy close packed ice everywhere.

Cape Tourmentine—Clear and fine; strong south-west wind; ice two miles in extent, moving cast.

Meat Cove- Thermometer, 60°; clear and warm; strong south west wind; heavy open ice everywhere, moving east.

Low Point-Clear, fine and warm; strong south-east wind; ice everywhere,

moving east.

Cape Ray, Newfoundland—Clear and fine; light south-west wind; fishing fair;

no ice.

St. Pierre, Miquelon—Clear and fine; prospects of cold weather; light south wind; no ice near shore; some open ice visible far out.

216 St. MARTIN STREET, 18th January, 1886.

A. A. STEVENSON, Esq., City Hall.

DEAR SIR,—I read with interest the letter in Saturday's Star bearing on the floods, and having until recently lived on the river bank south of St. Helen's Island, and where my father still resides, I have seen considerable of the river's changes. The only letter in the Star bearing on the real points is the one written by Dr. Mount, and I quite agree with him that the present flood has been caused by the mild weather at the time he mentions.

Some of the writers suggest the removing of all the islands on the south shore. Now they are the only protection Longueuil has from being drowned out, as the ice anchors around these islands and prevents shoving to a large extent. One writer suggests removing Isle Ronde also, and, if we were Americans, St. Helen's Island would also be removed. It is the writing of such that prompts me to write this letter.

I would like to ask these gentlemen what caused the flooding of Laprairie Bay and also at Isle Perrot, and around the Cascades; was it the deepening the channel at these points? Certainly not. Some people think it is our harbor and river improvements that cause the recent flooding spring and fall, and of course the Government and the Corporation are supposed to spend a lot of money, in fact all they have to satisfy some people's imaginations. The harbor improvements have no more to do with it than the flooding of the other points I have before mentioned, and until we can control the weather, it is useless spending a lot of money on surveys.

Anyone that has watched the river as Dr. Mount has done, must agree with him, a great portion of the city can be made free from floods by closing the sewers that enter the river above the main Craig Street sewer at that point to have it pumped into the river. If all the islands on the river were cleared away, and of course the expense would be something enormous, we would still be as likely to flooding as at Isle Perrot. I can, if you wish, give a great deal of information about the forming and breaking up of the river. A good deal of the present cry out is of course against the Government.

J. G. HOLLAND.

QUEBEC, 15th January, 1886.

To Mr. Alderman Stevenson, Chairman Committee of Inundations.

Sir,-Pursuant to your public invitation will you allow me to make a remark or two.

If we look abroad and observe the course pursued by other cities, both in America and Europe, we shall find that any great question of construction is invariably committed to the handling of qualified experts, as they are commonly designated "civil engineers."

These highly educated, and what is more to the point, specially educated men, have not only for their guidance the judgment and intuitions resulting in their individual persons from long years of study and the traditions and axioms of their comparatively modern profession, but they obtain, by the time and labor which they are paid to exert and spend in the local investigation of the particular case, a view as complete as possible of its special nature and requirements.

Now, then, qualified men would by no means despise the evidence of former inundations, such as you wish to be laid before your committee. They would use such evidence, and form an enlightened judgment on its bearings and value. Then, they would go into the question of probable expense, and submit a scheme for the approval of the citizens and their qualified representatives.

In a cause like this there is something approaching to completeness, up to the point of an actual laying hold of the work. But when your honorable committee should have heard the evidence and the schemes of all the old residents who have been interested for years watching the ice floes, it will not, therefore, be in any position to decide upon the future course of the city in relation to security from floods.

Much of the eviderce and all the schemes will want severe sifting, such as engineers only could give to them, and it is no disparagement to the honorable gentlemen of your committee that, in the absence of the qualifications alluded to, they will find their duties little other than burdensome, and in any event ineffective for a final decision. The expense of a scientific enquiry could not be very great, in view of the extreme urgency of the case, and it is to be earnestly hoped that a commission of experts will be appointed in the premises.

In Britain and in Holland, great works of protection have been in existence on the great waterways for centuries past, and on the Mississippi the subject is constantly receiving attention, and many important levees have been built; although, if our American neighbors would take up this question as a whole, and complete the banking as rapidly as might be, they would be immense gainers, for it is a work

that should not be attempted in driblets.

Asking your patience for these hasty notes.

I remain, dear sir, very respectfully yours,
HENRY HEMMING.

(Translation.)

ST. VINCENT DE PAUL, 21st January, 1886.

Sir,—Permit me to attract your attention to the subject of the floods in order to make known my opinion. Firstly, the floods are caused by the frasil which enters under the ice at the foot of the current, forming a hard solid mass from the bottom to the surface, which is called the vault; this vault extends from the foot of St. Helen's Island going northward, impeding the descent of the water in such a way that there is not enough space for the usual flow; the water is heaped back in the low places, and it is not until after the ice has risen above the city that the frasil diminishes and then the water takes its course again.

Sir, this is a plan which I propose to you: At low water I would have a channel dredged on the south of St. Helen's Island, 600 feet wide by 30 feet in depth and would construct a dam with openings at every 25 feet, and another at the head of the Island and a solid dyke, and by this means you will have a strong water power which could be utilized, and when the channel on the north side was blocked that on the south could be opened and I believe that would do a great deal to prevent the

floods.

Your very humble servant,

DIDYME MEILLEUR, Pilot.

George W. Stephens, M. P. P., appeared before the Committee and said:

The question of inundation has occupied the attention of the council at various

periods since the year 1860.

During the term of the late Mr. McQuesten, city surveyor, and while I held office, various remedies were discussed and instructions given that in future the levels of all new buildings should be given above high water mark, and a plan was adopted of raising the grades of the streets. This was done in many instances.

There are two ways of getting rid of the inundation difficulty:

First-By sluice gates and receiving tanks at the outfalls of the main sewers,

pumping the sewage during the stage of high water.

This could be done by establishing three pumping stations, one above the mill race, Point St. Charles, one at the Custom House, Point à Callière, a third at Cofborne Avenue.

Intervening small sewers to be connected to the main sewer interiorly. The Point St. Charles district could be done very cheaply, as the aqueduct embankment with a little repair already affords protection to this district between the canal bank

and the river side.

An experiment could be tried immediately with this section. The cost would be inconsiderable. The second remedy is to raise the streets throughout the inundated districts above flood level by depositing thereon the ashes of the city and the earth procured from excavations.

The expense could be met by a local assessment.

Under the local assessment by-law of Toronto, construction or reconstruction, but not ordinary repairs or maintenance of drains, sewers, roads and sidewalks, or for leveling, grading, paving, bridge building, curbing, sodding or planting, street sweeping, lighting and watering, are charged to the parties immediately benefited thereby. This plan is adopted for the most part throughout American cities. The adoption of this system would prevent what is called ward grabbing.

The reason why our older wards are neglected is that the taxes raised from them are largely spent in developing the unimproved parts of the suburban wards, most of which contribute lightly and draw heavily on the common revenue. If new works were, as they should be, charged upon the locality directly benefited, a large

sum would be set free over the city for general purposes.

The water in the St. Lawrence opposite the city will rise to flood height as long as there are batteries or shoals for the ice to lodge upon, and weather which produces frasil.

The long wharf at St. Lambert ought to be blown up. This would take away

one obstacle and reduce the swiftness of St. Mary's current.

The raising of the streets in the flooded districts would increase the value

of property.

I do not think the flooded districts are rendered unhealthy by the mixing of the sewage with the water, or that much sewage is flooded into the cellars. The objectionable and unhealthy feature is the allowing the ice to remain in the cellars all winter, and the consequent damp and chilly cellars.

Sewage forms but an infinitesimal part of the flooding water.

As a matter of fact sewage air does not come into houses while the sewers are full of clean water to the arch of the sewer.

There being no vacant space in the sewer, there can be no formation of air there to be sent back into the houses.

A comparatively empty sewer may generate unpleasant air; a sewer full to the arch with water does not.

There is no necessity of spending any money on outside engineering talent, Messrs St. George and Brittain are perfectly competent to deal with the question practically.

GEO. W. STEPHENS.

(Translation.)

COTEAU DU LAC, 25th January, 1886;

 D_{EAR} Sir,—I have just seen by the newspaper of the 23rd that you have resolved to take measures to prevent new floods.

As it is every citizen's duty to assist in some manner, I hasten to suggest a method to you, a method which is inexpensive, very efficacious and the effectiveness of which I have had occasion to judge of for twenty years.

The floods come from the clogging of ice and of "frasil" coming together in too narrow channels. To stop its effects it is sufficient to make a boom (according to the customary expression) crossing the river where there is plenty of water, about two leagues higher up than the place where the clogging occurs. This method is for the autumn. For the spring floods it would be necessary to bar Lake St. Louis by the same means. In this manner it would cost very little and be very effective, according to twenty years' experience. For fuller information, if the method is adopted, please write me. If this is going to appear in the newspapers, I beg you not to give my name and sign it, "A Citizen of Coteau du Lac."

Yours, &c.,

G. PAIEMENT.

Alderman Stevenson, Montreal.

P. S.—The effect which this "boom" would produce would be that the ice would make before the heavy frosts made themselves felt, so that when the ice had taken you would not have to fear the water because it would have already taken its course under the already solid ice; briefly, for the Boucherville Islands, the channels would be always free and the water would not be impeded in its flow.

Yours,

G. PAIRMENT.

(Translation.)

MONTREAL, 25th January, 1886.

SIR,—Since the Floods Committee invites everybody to give the help of his ideas upon the means to be taken to remedy the evil which is called "the floods," I will permit myself to submit to you very humbly my plan, believing it good and sure, above all for the ordinary floods, that is to say to stop the entrance of the water into the cellars by the pipes which connect with the St. Lawrence.

In the first place I propose to take away the pipes which discharge along the river, so that there should no longer exist on the banks of the river those openings by which the water, forced up by the rising of the St. Lawrence, finds this means of getting into the cellars. These pipes once taken away, place an immense pipe able to receive all the drains of the city, and carry it down below the city far enough, so that the rise of the water cannot reach up to the city.

Perhaps you will find it better to drain the city towards the side of the River des Prairies, but I think that it would be better to do so down along the St.

By this means we are sure to stop every ordinary flood. We shall then have to master the great floods like those of this winter. The water having overflowed Point St. Charles, I can only see the construction of walls at these low places, or if the thing is possible, to build large gratings by which this water could also be let into your large pipe. That, my dear sir, is the humble opinion of

Your obedient servant.

CHARLES DESJARDINS.

JACQUES GRENIER, Esq.

(Translation.)

Montreal, 25th January, 1886.

To Colonel A. A. Stevenson, Chairman of the Municipal Commission charged with the question of the Floods of the St. Lawrence.

SIR,—I have read the methods set forth by the Committee on the Floods; these methods, more or less ingenious, do not, however, bear an attentive examination, and they are generally beside the question. And yet the problem to be solved is simple, and I have not even the merit of discovering its solution.

Many cities have found themselves in the same plight as Montreal, it may be with watercourses less considerable than the St. Lawrence, but at bottom the prin-

ciple remains the same.

The heaping up of the ice is caused by the small velocity of the current; this small velocity is again partly broken by St. Helen's Island. The ice thrown from the Lachine Rapids into comparatively still water, moves slowly down as far as Longueuil and is not long in piling up and producing those ice mountains so often observed in the St. Lawrence. The only practical and the cheapest method of creating a quicker current, and at the same time enlarging the bed of the river, is dredging. This is a very simple operation nowadays, when as a consequence of the accomplishment of the Sucz and Panama Canals, industrial art possesses those powerful dredges which, with so little manual labor, do so much work. I do not hear anything said of well planned dredging tollowing along a profile established by soundings, and creating in the centre of the river a channel sufficiently deep to take the bulk of the water and create this precious current which will carry away with it in its course, according to its sphere of action, the drifting ice floes.

Two or three dredges would suffice to bring this work to a good end; but it is absolutely necessary that these should be powerful dredges, on the model of those which dug out Suez and Panama, for ordinary dredges would not do appreciable work.

Raising the level of the streets, besides being very costly, would involve the unhealthiness of all the houses now built in this part of the city.

If, sir, you approve of these opinions, although they are rather summary, and if they have any interest for you, I could undertake the execution of profiles and soundings, having already carried out similar works, and could then furnish you with detailed plans, from which it would be easy to calculate the amount of excavation to be executed, according to a uniform plan of bottom. This amount together with the limit of time would serve to determine the number of dredges necessary.

I would like to carry out this work under the eminent direction of the members of the city council, and I would be glad if you would be so kind as to take into consideration my offers of service, not as a contractor, but as an executive officer under

your orders.

If you wish to, sir, you might apply for references to Doctor d'Orsonnens, whose distant relation I am and who knows my family well.

I have the honor, sir, to beg that you will believe me to be

Your obedient servant,

MAINE.

(Translation.)

Mr. CHARLES LEGER, Pilot, of Lachine, P.Q., gives his opinion upon the causes of the periodical floods.

Montreal, 13th July, 1886.

Besides the information which I have given the Special Committee on the floods, I desire to add that the causes of the periodical floods at Vaudreuil and at Isle Perrot, have nothing to do with the floods at Montreal, which are caused as a consequence of the descent of the ice of Lake St. Louis, and I am in a position to prove positively what I affirm.

Between Isle aux Cheveaux and the last lock of the Beauharnois Canal, there is to be found a fall known by the name of the Jument Blanche (white mare). This

fall has a hollow which engulis everything that passes there.

About the 10th February, 1885, a storm came up and a considerable quantity of snow and frasil completely filled up this cavity. This fact re-occurs every seven or eight years towards the end of January and the beginning of February. Some forty years ago this fact occurred towards the end of the month of February, when the water flooded my father's building on Ile Perrot.

Towards the end of the month of January and the commencement of the month of February when the cavity in the Jument Blanche fall is filled up with snow and

frasil, as above mentioned, the ice rises over the lower lock of the Beauharnois Canal as well as over the Bris de l'Eau rock, situated at the foot of Isle aux Cheveaux, and this causes the delay in placing the lightships in this neighborhood and turns aside the natural course of the St. Lawrence towards the Sickle above Isle aux Cheveaux, and passes over the point of the Cascades and floods Ile Perrot as well as Vaudreuil. The water continues its course by the little river of St. Eustache.

The ice of Lake St. Francis, which is 33 miles in length and of a width of 6 miles has to come down through a space of a quarter of a mile between Coteau and

Clark's Island.

This ice is rotten before coming down and does not contribute at all to the floods of the city of Montreal.

his CHARLES X LEGER. mark

Witnesses-Charles Arnoldi, E. Christie.

TO THE CITY OF MONTREAL.

The Special Committee on Inundations respectfully report.

That as directed by the council, they have been engaged, during the past three months, in carrying on the work necessary to test the feasibility of the plan proposed in a former report, for the protection of the city from sewer floods. This consisted in constructing puddle-dams near the outlets of the main sewers leading to the river, with the view of preventing the rising waters, on the breaking up of the ice, from backing up into the street drains, and thence into the cellars of business places and streets in the low-lying districts.

The outflow of the sewage being thus obstructed, pumping stations were required

to pump the sewage over these dams into the river,

It was deemed advisable this year to limit the work to those sewers west of the custom house, which receive and discharge the sewage and surface water of the St. Ann's ward, that being the district which suffers most from these periodical floodings although the portions of St. Antoine, West and Centre wards, which drain through McGill, St. François Xavier and other streets into the William Street tunnel (having its outlet in front of the custom house) likewise enjoyed the benefits resulting from this undertaking through the blocking of St. François Xavier Street drain at the foot of that street and its connection, with the pumping cut by a wooden box drain 2×2

and 60 feet long, which your committee caused to be constructed.

Six pumping stations were established: No. 1 being in Commissioners Street, near the custom house, which received the contents of the sewers of William, McGill and other streets as far east as St. François Xavier. The sewer at this place is 14 feet six inches wide and 12 feet deep. The cut was 40 feet long 16 feet wide and 18 feet deep (with two side cuts $10 \times 8 \times 15$) in which was constructed a solid dam of puddle clay, 20 feet on the surface, tapering to 12 feet at the bottom and properly secured by heavy timbers, with a flume and sluice gate of the full dimensions of the William Street tunnel; the other twenty feet required for pumping and discharge basins. In excavating here, an object of great interest was discovered, the existence of which seemed to be known to very few, viz.: the ancient stone bridge, erected during the occupancy of the French, to span the open creek, which at that time ran along the present line of Commissioners Street. The masonry seems as strong and substantial to-day as when first erected.

The cut at No. 2 station, in Mill Street, near the canal tail race, at Tate's dock, was 41 feet long, 24 feet wide, and 17 feet six inches deep, with a dam of blue clay, flume and sluice gate, protected by timbers 20 feet 6 inches by 8 feet. This station

received the contents of a large number of drains in Point St. Charles.

Nos. 3, 4 and 5 stations were located at the foot of Forfar, Conway and Britannia Streets.

No. 6 station, in St. Etienne Street, near the abutment of the Victoria Bridge.

For the further protection of this part of the city, it was found necessary to construct an earth embankment from Forfar to Britannia Street, 477 feet long, average depth 7 feet 6 inches, average width 9 feet 6 inches, with a small flume and flood gate in surface drain on Britannia Street, and a similar embankment, south of that street, on river front, 12 feet long, 4 feet wide, 3 feet deep, with a sluice and gate. It was also found necessary to erect embankments at various places above Victoria Bridge on the rifle ranges and the Nun's farm. These consisted of:

1. A dam and embankment at top of ranges, 22 feet long, 20 feet wide, and 7 feet deep, with flume and flood gate, the flume being 20 feet long, 2 feet wide, and 3

feet deep;

- 2. A long embankment, about 350 feet, average width 5 feet 6 inches, average depth 5 feet 6 inches, with one flume and gate, the flume being 20 feet long, 1 foot 10 inches wide, and 2 feet deep;
- 3. A second embankment, length 273 feet, average depth 4 feet, average width 5 feet, with flume and flood gate, the flume being 14 feet long, 1 foot 4 inches wide, and 1 foot 9 inches deep;

4. A dam and bank at back of butts 18 feet long, 10 feet wide, 6 feet deep,

size of flume 13 feet long, 1 foot 10 inches wide, and 1 foot 5 inches deep;

5. A dam in front of butts, 12 feet long, 7 feet wide, 7 feet deep, with flume and gate, size of flume 13 feet long, 1 foot wide, and 1 foot 2 inches deep;

6. A bank and dam north of rifle ranges, 12 feet long, 12 feet wide, 4 feet deep,

with flume 13 feet long, 1 foot 4 inches wide, and 1 foot 5 inches deep;

7. A dam and embankments on the Nun's farm, 24 feet long, 12 feet broad, 6

feet deep, with flume 21 feet long, 3 feet wide, and 2 feet 6 inches deep;

8. An embankment and dam also on the Nun's farm, 50 feet long, 8 feet wide, 3 feet high, with flume and gate; flume 12 feet long, 12 inches wide, and 12 inches deep.

The work was not given out by contract, but was done under the immediate superintendence of Mr. Richard McKeown, who carried it out to the entire satisfaction of the committee. The same remark is applicable to Mr. James Wright, engineer, who had charge of the machinery.

The committee had the advantage of the co-operation of Messrs. Walter Shanly, M.P., C.E., John Kennedy, harbor engineer, Louis Lesage, superintendent Montreal waterworks, P.W. St. George, city surveyor. F. B. Lavallée, deputy city surveyor.

also took an interest in the work and gave very valuable assistance.

Instead of leasing or hiring pumping machinery, as had been originally intended, your committee found it would be more in the city's interest to purchase the pumps

required.

Accordingly they procured from the Morris Machine Works, Baldwinsville, N.Y., five Heald and Sisco No. 12 centrifugal vertical pumps, each capable of discharging 10,500 gallons per minute. Three of these were placed in No. 1 cut at Commissioners Street. The total capacity of the five being 75,000,000 gallons per day of 24 hours. Powerful hand pumps of modern pattern were sufficient for stations 3, 4 and 5, and a 6" rotary steam pump, owned by the road department, was used in No. 6.

The Grand Trunk Railway Company gave your committee valuable assistance by granting the use of three locomotives, on which considerable alterations were made to fit them for driving the large pumps on Commissioners and Mill Streets. They answered the purpose admirably, and your committee would recommend that, on examination and approval by an expert, they be purchased by the city and retained for similar work in future years. They can be procured for \$1,250 each, as they stand at present, including all charges for the alterations made to adapt them for this work.

The committee consider that it would be impossible to get the same amount of motive power in any other way for a like sum, and they therefore consider that the acceptance of the terms named in the letter to Mr. Wallis, mechanical superintendent, G.T.R., which is submitted herewith, would be most advantageous to the city. In the event of the council not purchasing these locomotives, the cost of their alteration and their return to the G.T.R. works will have to be defrayed by the city.

Whatever plans or schemes may ultimately be adopted for the prevention of floods, it is quite evident that, so long as the water in the river does not rise higher than the revetment wall, the pumping of the sewage furnishes an effectual and comparatively inexpensive method of keeping the cellars and streets free from inundation, and will doubtless be continued in future years. The experiment of this year, notwithstanding numerous difficulties and drawbacks, proved as satisfactory as the most sanguine could desire.

There is ample evidence to show that for eight or ten days previous to the 17th of April, the water in the river kept steadily rising, and attained a level which, but for the damming and pumping of the sewers, would have flooded nearly all the cellars in St. Paul, Commissioners and the lower portions of many other streets, in

the business part of the city, as well as in St. Ann's ward.

Scores of people testify that in former years, with the water in the river at a similar height, they had been inundated to a depth of several feet, whilst this year, up to the day above named, they were perfectly dry. On that day, however, the water overflowed the river banks and revetment wall in a disastrous deluge, having risen to the unprecedented height of 44 feet 4 inches above the bottom sill of the lower lock of the old Lachine Canal (that being the datum line adopted by the Harbor Board for that purpose). In the great flood of 1861, the depth of water was 41 feet 8 inches, so that this year exceeded 1861 by 2 feet 8 inches. From Saturday, the 17th, at noon, until Tuesday, the 28th, when the ice jam in the river gave way, pumping operations were, of course, suspended. But as soon as the water commenced to recede, work was again resumed and within two or three hours the sluice gates in all the flumes were opened, and the pumps were kept in operation until the end of the week.

The expenditure already made in connection with this amounts to about \$8,000 and your Committee estimate that it will require between \$4,000 and \$5,000 to cover outstanding accounts and the work yet to be done. Should the council determine to purchase the Grand Trunk Railway locomotives, \$3,750 will require to be added. An account of this expenditure, and also a statement or inventory of the plant now in possession of your Committee is appended to this report. The value of the machinery and plant on hand, exclusive of the locomotives, is between \$3,000 to

\$4,000, all of which will be available for use in future years.

Workmen are at present engaged in restoring the rifle ranges and Nun's farm to their former condition. The work will be completed in a very few days. The cut at Mill Street Station was found to be in a most unsuitable place, the soil there being a sort of quicksand, and there being a number of old flumes and pipes at that particular spot. There is a much better location 150 feet higher up the street, which is clear of all obstructions, and which will have to be adopted in future years. The pumps, framing, &c., were therefore taken up, and the brickwork of the drain restored.

Through the kindness of Mr. Conway, the pumps and other plant used at that

station have been stored in the Government yard adjoining.

The pumps at Commissioner Street station have not been removed. Everything is left just as it was after the flood, awaiting the decision of the council as to what action is to be taken on the recommendations of the city surveyor, which accompany this report. Something must be done immediately, however, to remove the large bank of earth, so that the people in the neighborhood may not have cause of complaint.

Recommendations by the Committee.

Your committee are of opinion that the council should adopt measures for carrying on permanently the work undertaken by them this year, and as everything appertaining to streets and sewers properly comes within the jurisdiction of the Road Committee, your committee think that the machinery, plant and other material

now under charge of your committee should at once be handed over to the Road Committee so as to enable them to take steps for the protection of the present stations and to perfect arrangements during the summer for next season's work. The special committee could then be discharged from further obligations in connection with this matter.

The experience gained by your committee, in connection with these foregoing experiments, warrants them in recommending for the consideration of the council:

1. That properly constructed flood gates be placed during next summer at the mouth of all the main sewers, to answer the same purpose as the puddle did this spring, and the requisite pumping machinery erected in their vicinity, to empty the sewage into the river.

Care should be taken that one or two extra pumps should always be available in case of accident. Craig Street tunnel emptying at the foot of Colborne Avenue would require, say two No. 15 pumps, having a discharging capacity each of 16,500 gallons

2. Commissioners Street station through which William Street tunnel is dis-

charged should have an additional No. 12 pump, making four in all.
3. Forfar, Conway, Britannia and St. Etienne Street drains should be connected with Mill Street station, and two additional No. 12 pumps supplied, making four in

all, as at Commissioners Street.

The cost of these works is estimated by the City Surveyor's report (hereunto-This amount could with great annexed) to be in the neighborhood of \$10,000. propriety be taken out of the drainage loan, inasmuch as the greater part of the work in question would in any event have to be done by the road department at an early date.

Schemes suggested by Citizens for remedying the evil.

Numerous plans or projects have been laid before your committee respecting divers works in the bed of the river, which their respective advocates claim would tend to prevent, or at least greatly mitigate, the evils of inundation. these are:

1. The construction of piers or breakwaters across the foot of Lake St. Louis. Lake St. Francis, or other points above the Lachine Rapids. These piers, it is claimed, would have the effect of preventing the ice breaking away in the fall; when the ice bridge is forming, and would also hold it later in the spring than at

present.

If these expectations were realized the channel in front of and below the city. would be less likely to be choked in the fall, with the floating ice, which during a thaw, comes down in great quantities, from these two lakes, and would render it more likely that the ice in the harbor and its vicinity would get away in the spring before the lake ice comes down. It is also claimed that the construction of these piers would be very beneficial to all the municipalities below Lachine, on both sides Your committee deem this project to be one of great importance, meriting an early and earnest consideration at the hands of the Governments and the Council.

2. The removal of the old Railway Wharf at St. Lambert's, and otherwise clearing as well as deepening the south channel of the river from Victoria Bridge to Longueuil.

3. The straightening, deepening and widening of the ship channel as far as

Longue Pointe.

4. The removal or shortening of the long wharf, which, it is claimed, projects

unduly into the channel of the river.

5. The removal of Isle Ronde, and the clearing of the channel in the neighborhood of the Boucherville Islands.

6. The blowing up of the ice bridge, at different times and places during the spring months.

With regard to the above, your committee have only to say that as they relate to matters beyond the jurisdiction of the council, the river being entirely under the control of the Government, they would urge upon the council to obtain a conference with the Government on the whole subject. The committee hope that the projects above enumerated will be carefully considered by the Board of Engineers. which, it is understood, is now or shortly to be appointed.

Final Recommendations.

Your committee are, however, of opinion that no time should be lost by the council in taking measures to secure:

1. The adoption of higher levels throughout the low-lying districts of the city. which new levels should be gradually worked up, under the supervision of the Road Department, at the expense partly of the city, and partly of the localities benefited.

2. The reconstruction, and at a higher level, of the worn-out revetment wall. together with the construction of levees around the whole of the Point St. Charles district, an equitable proportion of the cost of these works to be borne by the Dominion out of the general revenues of the country.

3. The application to the Dominion and Local Parliaments, now in session fer legislation to enable the Governor in Council, in conjunction with the city council to initiate and complete the necessary works, and also to authorize the council to nego-

tiate a loan for the city's share of the expense.

In conclusion, your committee hope and trust that the general interest which has lately been awakened on this most important subject will not be allowed to subside, and that the council, having at last taken the matter in hand, and accomplished something in the right direction, will never slacken its efforts until some effective means are found to remedy to a great extent, and in time entirely prevent, the recurrence of those disastrous inundations which periodically cause incalculable loss to merchants and manufacturers, and produce indescribable misery and suffering in the homes of the working classes whose dwellings are situated in those portions of the city more immediately affected thereby. Montreal in the past, has been equal to every emergency, and her citizens and city council can surely never rest satisfied until all danger of inundations is entirely removed.

The whole nevertheless respectfully submitted.

A. A. STEVENSON, Chairman, M. LAURENT, J. McSHANE, JR., ROBERT PATON MoLEA, Representing the Board of Trade. D. A. WATT.

Representing the Corn Exchange Association.

COMMITTEE ROOM, CITY HALL, MONTREAL, 10th May, 1886.

TO THE CITY OF MONTREAL.

The Special Committee on Inundation respectfully report:

That the expenditure incurred in connection with their work from the beginning of February to date amounts to \$12,700 or \$4,700 in excess of the original appro-

In addition to this, however, there is the question of the locomotive to be considered. The Grand Trunk Railway Company offers to sell the three engines furnished to your Committee for \$3,750, and should it be decided to take them the total

additional appropriation required will be \$8,500.

Should the city not purchase the three engines the sum of \$1,665 will have to be paid for repairs and alterations which had to be made to them; \$30 for the use of them, and \$300 for removing them back to the company's yard, or \$2,000 in all. which would be practically lost to the city.

Your committee could therefore recommend their purchase and assumption by the Road Committee, together with the other plant remaining on hand, amounting to \$3,827, as per inventory; that your committee receive a further appropriation of \$8,600 as above stated, to pay for the engines and all outstanding claims, and that the Road Committee be directed to carry out such permanent inundation work as may be determined upon in accordance with the city surveyor's report.

The whole respectfully submitted.

A. A. STEVENSON, Chairman, M. LAURENT, J. McSHANE, Jr., ROBERT PATON McLEA,

D. A. WATT.

Representing the Corn Exchange Association.

Representing the Board of Trade.

CITY HALL, MONTREAL, 14th June, 1886.

TO THE CITY OF MONTREAL.

The Finance Committee respectfully report:

That, as directed by the council, they have considered the accompanying report of the Special Committee on Inundation for a supplementary appropriation, and that they concur in the recommendation therein made.

The whole nevertheless respectfully submitted.

J. GRENIER.
J. H. MOONEY,
JEREMIE PERRAULT.
WILLIAM FARRELL.

COMMITTEE ROOM, CITY HALL, MONTREAL, 17th June, 1886.

Reference No. 70,675.

MEMO:—Answer the letter from the City Council or its committee thus:

That the suggestion therein made has received the consideration of the Minister and has been submitted by him to Council, but that the Government do not see that the Dominion at large has any interest in the proposed levee at Point St. Charles, and therefore do not feel that they could recommend to Parliament a vote of money for that purpose. But that when the Commission of Engineers appointed by the Government report finally on their examination and the causes of the flood, should there be any Dominion work recommended, the Government will not fail to give to such suggestions their best consideration, with the view, if possible, of recommending the matter to the favorable consideration of Parliament.

H. L. L.

13th July, 1886.

Reference No. 71,313.

(Translation.)

LAPRAIRIE, 5th October, 1886.

To the Honorable Sir HECTOR LANGEVIN, Minister of Public Works, Ottawa.

SIR,—I have the honor to transmit to you herewith enclosed a copy of a resolution passed yesterday evening, by the municipal council of the village of Laprairie, relating to the ice-breakers in Laprairie Bay.

I have the honor to be, sir, your most obedient servant,
A. J. A. ROBERGE.

(Translation.)

EXTRACT from the minutes of meetings of the municipal council of the village of Laprairie.

"At a general meeting of the municipal council of the village of Laprairie, held at the usual place on Monday, the fourth October, eighteen hundred and eighty-six.

"It was moved by councillor Ambroise Hebert, seconded by councillor Octave

Dumoutel, and unanimously resolved;

"That this council has learned with extreme satisfaction the decision of the Government of the Dominion of Canada, with reference to the immediate construction

of ice-breakers in Laprairie Bay;

"That in the opinion of this council, the carrying out of these important works has not been commenced a day too soon, seeing that every winter a considerable portion of this village is threatened with imminent ruin, and that only just time enough is left to complete the work before the ice takes;

"That this council hastens to seize the first occasion which has offered to expressits lively gratitude to the Honorable Minister of Public Works, Sir Hector L. Langevin, for having so kindly considered in a favorable manner the petitions of this council, which have been so effectively supported by the members for the county of

Laprairie in the Federal and Local Houses.

"That while thoroughly approving the appointment of and the works hitherto accomplished by the commission on the floods, this council solicits a special enquiry into the means of preserving this village from the floods caused by the taking of the ice, and a separate report containing an estimate of the works to be carried out to prevent such floods;

"That this council would be highly honored and very happy at the same time to receive a visit from the Honorable Minister of Public Works, a visit which would enable him to note the progress of the works commenced and would enable the

residents of this locality to express personally to him their gratitude.

"T. A. BRISSON, Mayor.

"A. J. A. ROBERGE, Secretary-Treasurer.

"A. J. A. Roberge,
"Secretary-Treasurer."

(Translation.)

The Honorable SIR HECTOR L. LANGEVIN, K.C.M.G., C.B., Ottawa.

Sir,—The secretary of our municipality, Mr. Roberge, has received instructions to send you copies of certain resolutions adopted yesterday by the Council of Laprairie. The fourth of these resolutions necessitates some explanation which I hasten to give you in order that no delay may be incurred in giving it effect, provided

always that you deem it opportune to accede to our request.

The village of Laprairie suffers not only from the great floods in the spring. In winter when the ice takes, the water covers over a great part of it, and afterwards freezes and causes considerable injury to property. The existence of the old embankment of the "Montreal and Champlain" railway, and of a levée constructed by the municipality, would allow the village to be effectively protected against the inconveniences referred to, and this at a comparatively small cost. The corporation is disposed to contribute to a certain degree towards this expenditure, but the important point at the moment is to know the exact amount of it. In order to arrive at that it would be sufficient to take some levels for a distance which is not very considerable and to calculate the cost of the embankment to be made—the work of a day or two at most for the Government Engineers. That, sir, is what the fourth one of the resolutions forwarded to you requests on your part. The kindness with which you have hitherto treated Laprairie leads me to hope for a favorable reply from you.

I have the honor to reiterate the invitation which has been given you to visit our locality. In the absence of other display, you will find there a population grateful for what you are doing for it.

I remain, sir, your obedient servant,

T. A. BRISSON.

LAPRAIRIE, 6th October, 1886.

Reference No. 72,307.

HARBOR COMMISSIONERS OF MONTREAL, SECRETARY'S OFFICE,
MONTREAL, 8th November, 1886.

Sir,—Your letter of the 2nd inst., enclosing copy of a report from the Montreal Flood Commission, under date of the 28th ult., has been duly considered by the Commissioners.

In reply, I am to say, that the Commissioners are prepared to place four of their tugs at the disposal of the Department, with the necessary ice breaking prows (at an estimated cost of about \$1,000), free of all charge.

The working expenses, &c., of course will have to be arranged for by your

Department.

As there is very little time left before the close of navigation to properly prepare the tugs, the Commissioners would respectfully ask as early an answer as possible.

I have the honor to be, sir, your obedient servant, H. D. WHITNEY, Secretary.

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

Reference No. 72,454.

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 10th November, 1886.

On a memorandum dated 3rd November, 1886, from the Minister of Public Works, representing that Parliament at its last Session, made the following named vote: "Examination in connection with spring floods at Montreal and vicinity, \$5,000," on the understanding that a like sum was to be contributed by the City of Montreal, and that of the amount so voted the sum of \$4,000 has been advanced to the Commissioners appointed to enquire into the causes and the means of prevention of such floods, thus leaving available a balance of \$1,000.

The Minister further represents that the Commissioners now apply for a further

advance of \$3,000.

That the chief engineer of his Department to whom the matter was referred, suggests that the advance so applied for be made. The Minister recommends that authority be granted in accordance with the suggestion of his chief engineer, and that to enable the proposed payment of \$3,000 to be made, a special warrant of His Excellency the Governor General do issue for the sum of \$2,000, the Minister of Finance having reported there is no Parliamentary appropriation from which the same can be defrayed, and that a like amount be placed in the Supplementary Estimates to be submitted to Parliament at its next Session and the said sum of \$2,000 to be recouped to the Government from the amount to be contributed by the City of Montreal.

The Committee submit the same for Your Excellency's approval.

JOHN J. MoGEE, Clerk Privy Council.

To the Honorable the Minister of Public Works.

Reference No. 72,486.

CITY CLERK'S OFFICE, CITY HALL, MONTREAL, 16th November, 1886.

SIR,—I have the honor to transmit to you herewith an extract from the minutes of a meeting of the Finance Committee, held on the 11th November inst., accompanied by an extract from the minutes of the City Council with reference to the experimental measure suggested by the commissioners appointed to enquire into the causes of floods at Montreal.

I have the honor to be, sir, your obedient servant,

CHAS. GLACKMEYER, City Clerk.

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

EXTRACT from the minutes of a meeting of the Finance Committee, held on the 11th November, 1886.

The committee having considered the resolution of the special Committee appointed to consider the report of the commissioners on inundations, suggesting the keeping open of the channel between Sorel and Three Rivers during the winter, by which resolution the Committee concurred in the appropriation of two thousand dollars as the city's contribution towards the cost of the proposed experiment, it was unanimously resolved to concur in the said resolution.

Certified.

CHAS. GLACKMEYER, City Clerk.

EXTRACT from the minutes of a meeting of the Special Committee on floods, held on the 10th November, 1886.

Submitted and read the letter of A. Gobeil, Secretary Public Works Department, Ottawa, and the accompanying report from the Commissioners suggesting the propriety of keeping open the river between Sorel and Three Rivers in winter as a means of preventing the floods.

The Committee having duly considered the said report it was resolved to concur in the suggestion, and that the Finance Committee be asked to appropriate the sum

of \$2,000 as the city's contribution towards the cost of the experiment.

Certified.
CHAS. GLACKMEYER, City Clerk.

EXTRACT from minutes of Council, monthly meeting, Monday, eighth day of November, 1866.

Submitted and read a letter from A. Gobeil, Secretary of the Department of Public Works, Ottawa, transmitting copy of a report of the Commissioners appointed

to enquire into the causes and the means of prevention of floods at Montreal.

On motion of Alderman Grenier, seconded by Alderman Stevenson, it was resolved, that said letter and report be referred to a special Committee composed of Aldermen Laurent, Donovan, Mooney, Rolland, Hamelin and the mover and seconder, with power to appropriate, subject to the sanction of the Finance Committee, a sum not to exceed \$2,000 towards the experimental measure suggested by the Commissioners, and deal generally with the question of the periodical inundations at Montreal.

Certified.

CHAS. GLACKMEYER, City Clerk.

Ref. No. 72,666.

(Telegram.)

MONTBEAL, Que., 25th November, 1886.

To SIR HECTOR LANGEVIN.

Inundation Committee very anxious to know if Government will take immediate action to keep river open as suggested by Commissioners. Early answer requested.

(Telegram.)

CHIEF ENGINEER'S OFFICE, PUBLIC WORKS DEPARTMENT, OTTAWA, 25th November, 1886.

To C. GLACKMEYER, City Clerk, Montreal.

The Government will contribute two thousand dollars towards experiment of keeping St. Lawrence open as proposed by Flood Commission.

Ref. No. 72,755.

(Translation.)

SIR,—Following and as a supplement to the report of a certain exploration made lately at Laprairie by Mr. Lafleur, I take the liberty of submitting for your consideration some facts suitable for deciding definite action on the part of your department, if such is its intention.

Although the season is rather advanced, I do not see any serious obstacle to the accomplishment of these works, particularly as to the portion comprised between the two icebreakers under construction. An embankment of the nature of that which is suggested by your humble servant would be the fitting complement of the protection works undertaken at the south-west extremity of our village, the portion which has been so seriously tried especially for some years past. This embankment - or rather this dyke-would suffice-with very rare exceptions-to prevent the ice entering the low part of the village. It would advantageously take the place of the building of a third ice-breaker between the two first, the necessity of building which might well be recognized before long. If the officers of the Department will be good enough to recall it to their memory, the people of Laprairie were given to understand that at least two complete ice-breakers would be put up this year. However, there is every right to consider that only one and a half are under construction, seeing the small dimensions of one of the two. I do not mention these matters by way of complaint. On the contrary, I have only to express to you our gratitude for the promptness with which you have come to our aid and for the deference which the officers of your department have shown me under all circumstances as Mayor of the place. For my own part, I wish nothing so much as to avoid the reproach of requesting unreasonable things and of leading the Government into useless expenditure. I feel myself perfectly at ease in this respect and I am sincerely convinced in making the present demand that the works which are the object of it have a great importance, that the cost of them would be quite moderate, and that their execution would result in preventing heavier expenditures later on.

From the point of view of the floods, the carrying out of the works asked for would furnish the proof that Laprairie could be preserved from the ravages caused by the floods of the St. Lawrence at a comparatively small cost. In any case, the plan now submitted for the study of the engineers of your department, and which refers specially to the winter floods, has considerable importance, not only for Laprairie, but also for the whole district of which this place is the chief town. carrying out of it would have as its effect not only a sensible increase in the value of property at Laprairie, but it would also ensure at certain seasons to the people of the surrounding parishes communications of which they are deprived in the existing

state of affairs.

To sum up, sir, I believe I can affirm that reasons of public interest are strongly in favor of this project, the realization of which is as easy as it is little burdensome for the Government of the Dominion of Canada. I therefore express, in the name of the people of this district, the ardent wish to see it accomplished during the present season, and I am, with the greatest respect, sir, your most obedient and very grateful servant,

T. A. BRISSON, Mayor.

The Honorable Sir HECTOR L. LANGEVIN, K.C.M.G., C.B., Minister of Public Works. LAPRAIRIE, 25th November, 1886.

Reference No. 75,274.

MONTREAL FLOOD COMMISSION, MONTREAL, 10th March, 1887.

SIR,-The commissioners, on account of the severity of the past winter, the strength of the ice covering below this city, the large amount of snow remaining at this date and the possibility of a rapid thaw accompanied by heavy rains producing a breakup while the ice is yet very strong, have had under their consideration the propriety of an experiment with explosives for the purpose of weakening the ice about and below Longue Pointe, where they believe its long continued firmness last April was the chief cause of the excessive flood in that month. As this is the only means of amelioration which is now available, against the possible effects of the approaching breakup, they have come to the conclusion that, however uncertain may be the result, the experiment ought to be made, especially as it will not be attended with very great expense. It is possible that the river may break up and the ice depart without producing a flood, as is the case in the majority of years. The spring floods in the last quarter of a century have occurred always in the month of April, and only in the years 1861, 1865, 1869, 1885 and 1886; the last reaching 2 feet 9 inches higher than any of the preceding ones. This gives five spring floods in 25 years, an average of one in five years; but, since they occurred in both 1885 and 1886, another is possible this year. It is impossible to resort to explosives with any hope of success after the movement of the ice has developed the probability of a flood.

They propose therefore to break up with explosives the field ice in the main channel extending from above Longue Pointe towards Isle St, Therese, upon which they ask authority to expend a sum not exceeding \$3,000. The ice, of course, cannot be removed from the channel, but, if so broken up, the better exposure to the influences of advancing spring and the wear of the current would, they believe, so weaken it, that it would give way before the down coming ice, and allow the latter to be distributed over a greater length of river, thus forming a longer and lower

temporary dam.

As the authority of the Dominion Government will be required for any such experiments in the main channel of the River St. Lawrence, the commissioners request the same be given the m for this purpose at as early a date as possible.

We have the honor to be, sir, your obedient servants,

THOS. C. KEEFER, JOHN KENNEDY, HENRY F. PERLEY, PERCIVAL W. ST. GEORGE.

A. Gobeil, Esq., Secretary Public Works, Ottawa.

Reference No. 75,275.

CHIEF ENGINEER'S OFFICE, OTTAWA, 16th March, 1887.

Sir.—With reference to the letter of 10th March from the members of the commission appointed to enquire into, and report on the floods at Montreal, asking authority to expend a sum not exceeding \$3,000 in breaking up the ice in the main channel of the St. Lawrence extending from above Longue Pointe towards Ile Ste. Thérèse, I have to state as follows:-

In November last, the commission suggested that an experiment be made to keep open during the winter the channel of the St. Lawrence above Three Rivers, by the nee of tugs especially prepared for that purpose, and an Order in Council was passed on the 26th November, authorizing the sum of \$2,000 towards carrying out this experiment, and directing that a special warrant of His Excellency the Governor General be issued and the amount placed in the Supplementary Estimates for the current year.

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Owing to the lateness of the season it was impossible to carry out these experi-

ments, and the amount authorized was not required.

As it is probable that Montreal may be flooded again during the ensuing spring, the commission is desirous of opening up by means of explosives a portion of the channel below Boucherville, that having been found to be the point where the free flow of the river in the spring is most retarded.

The commission states that the cost of these explosives would be \$3,000, and as I am of the opinion that the experiment is worthy of trial I have to suggest that, as the amount required in connection with the tugs has not been expended, it be transferred and made available for the purpose of the explosions the commissioners are

now desirous to try.

I am, sir, your obedient servant,

HENRY F. PERLEY, Chief Engineer.

A. Gobeil, Esq., Secretary Public Works Department.

Reference No. 76,020.

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 7th April, 1887.

On a memorandum dated 4th April, 1887, from the Minister of Public Works-submitting that Parliament at its last Session voted the sum of \$5,000 towards the cost of an "Examination in connection with spring floods at Montreal and vicinity," and it was understood that the sum of \$10,000 was to be expended on account of such examination, and that the Corporation of Montreal would furnish one-half of the amount.

The Minister represents that an over expenditure has been incurred by the Government of \$2,184.60 in excess of the amount voted by Parliament, and that the

Flood Commissioners now apply for a further credit of \$3,000.

The Minister recommends, as the necessity is urgent, and the Minister of Finance having reported there is no appropriation from which the same can be taken, that a special warrant of His Excellency the Governor General do issue for the sum of \$2,815.40, which, added to the vote of \$5,000 and the over expenditure of \$2,184.60, will make the \$10,000 which it was decided to expend on the examination—the amount of the said over expenditure, and that of the warrant hereinbefore mentioned, in all \$5,000, to be recouped to the Government by the payment on the part of the Corporation of Montreal of the promised contribution.

The Committee advise that a special warrant do issue as recommended.

JOHN J. McGEE, Clerk Privy Council.

Reference No. 76,343.

(Translation.)

The Honorable Sir HECTOR LANGEVIN, C.B., K.C.M.G., Ottawa.

SIR,—I have the honor to invite your attention again to the request of the Council of the Village of Laprairie concerning the improvements to be made to the harbor of this place and certain works of protection against the floods of the River St. Lawrence.

Immediately after the interview with which you were good enough to favor Messrs. Tassé, Charlebois and myself, on the 6th instant, I would have liked to have prepared this document and submitted it to you, but, since then, illness, and, indeed, death, having visited my family, I am compelled to explain the delay which has occurred, and to beg to be excused for it.

Having accomplished this duty, I hasten to enter into the heart of the subject

which is engaging us.

The question of improvements to the harbor of Laprairie has been before you. sir, since the winter of 1882. During the years 1882, 1883 and 1884, works of some importance were accomplished, especially at the quay and in its neighborhood. Everytime that I have had an opportunity of so doing, I have plainly expressed my gratitude for all that the Government has done in the interest of the taxpayers of this district, and I am happy to renew this expression to-day. To complete the work on this side, nothing more remains but to raise that portion of the quay which is nearest to the shore to the same level as the rest, and to finish the channel which leads to the waterway of the river. Two communications addressed by myself to your Department, under date of the 16th of March and the 28th June, 1886, contain

information upon the same subject.

During a certain period, Mr. Arnoldi seemed to think that the channel as it now exists is sufficiently wide. However, the force of the wind in Laprairie Bay, the extent of which you know, is sometimes such that the passenger boats are in danger of touching, and that, in fact, they have touched on the edges of this channel. When they are towing a barge the risk of it is by so much the more increased. Indeed, if I may be allowed to employ an argument ad hominem, Mr. Arnoldi, while passing through this channel at the time of his visit in the month of June last, went aground himself and broke one of the wheels of his yacht. I think, however, that this gentleman did not need this accident to modify his first opinion, and that without it he would have decided to make a report in favor of undertaking the works asked for; but I think that the instancing of what happened to him is of a nature to produce upon the Honorable the Minister, under whose orders he is, a more effective impression, and that is why I signal him out.

In support of my case, I might again enumerate all the reasons mentioned in the original petition of the year 1882, asking for the opening of this channel, reasons which have preserved all their force, but I content myself with referring thereto. It will be sufficient for me to add that with the present channel there can be employed, for the transport of grain, wood, coal, etc., only barges of medium capacity, or to only half load them so as to make two trips instead of one. If this state of things is favorable for the navigation company which carries on the service here, it cannot be so for the trade in general. It was in this way, too, that you understood it, sir, by admitting the principle of the necessity of a new channel, and by ordering the commencement of the dredging works therefor. If it pleases you to put the crown to this work which is already well advanced, the public will have the full benefit of the expenditure made up to date by your Department on behalf of an improvement which has been claimed for a long time, and the utility of which nobody can contest.

In the course of our last interview you pointed out to us that the ordinary credits for the improvements of harbors and rivers having not yet been voted by Parliament, it would be difficult for you in any event to do anything before the 30th of June next. Would it not at least be possible to have the dredge come here at the opening of navigation? For, when once the month of May is over, it is impossible to tow it above the Victoria Bridge. I especially invite your attention to

this latter point.

The continuance of the works of protection against the river floods is equally of . the highest importance for the Village of Laprairie. This question is one of painful reality for many families which at this moment are casting anxious looks towards the Dominion Government and are expecting from it their safety. imperative duty of the municipal authorities to urge our rulers with earnest requests in order to obtain prompt help from them, and to work so as to prevent as far as may be in their power the recurrence of the disasters which signalized the floods of 1885 and 1886. I had the honor, in two letters dated respectively the 6th October, and the 25th November, 1886, to submit, for your consideration, a very simple and inexpensive plan of protection, which met with-I am confident of thatthe approval of the engineers of your department. The cost of it is estimated at \$5,000, according to Mr. Perley's report. The first thing which strikes one, is that

such a sum seems very little, seeing that it is intended, for the completion of dyking works of a nature to protect a village of such importance as ours. It would not be so without the proportion offered by the municipality in the shape of work already done and the value of which certainly surpasses by half the total sum asked from your Government.

In order to conform with the recommendation contained in the report above cited, the corporation of Laprairie has ensured for itself the possession of the old "Champlain and St. Lawrence" embankment, as well as of all the land necessary elsewhere. As was agreed upon during the interview of the 6th instant, the corporation undertakes to replace the stone pavement which exists in some places in the projected embankment, and to do so in a manner satisfactory to those concerned. After having studied the question well, I cannot arrive at a better suggestion than that of causing to be deposited on the quay the earth taken out of the river by the dredge, in order to cover with it the streets which are intended to form part of the dyke. Without being able to determine exactly the geological composition of the bed of the St. Lawrence in Laprairie Bay, I can affirm, being supported therein by experience, that no heavier, more solid, and more durable soil could be employed for the purposes desired. Evidently, it is not possible to find in place, in the heart of the village where all the houses are, the necessary materials for raising the streets. As soon, then, as it is necessary to go to some distance, the harbor is as near at hand as any other place at our disposal. On the other hand the use of such advantageous soil in preference to arable soil without consistence, would compensate and even more than compensate the increased expense incurred to obtain it. have a permanent work which it will not be necessary to repair or to commence over again the following year. In fact, the recommendation to no longer obstruct the river, which has been made by so many competent engineers will be accomplished by the same means.

Casting a glance of the eye over this epistle, which is so long that it would be difficult to read it all at one time, I am afraid, sir, that I have abused your patience. The desire to render a service to my fellow citizens of which they are absolutely in need, is my only excuse. If, on the most evil day of its history, Laprairie finds a powerful and enlightened protector in you, no one will have a right to be astonished at it, for the goodness of your heart is known and appreciated by the people of this

village, for whom it has been shown more than once already.

In the hope that it will not contradict itself in this decisive case, I have the honour to sign myself, sir,

Your very humble and obedient servant,

T. A. BRISSON, Mayor of Laprairie.

LAPRAIRIE, 20th April, 1887.

Reference No. 76,582.

CITY CLERK'S OFFICE, CITY HALL, MONTREAL, 30th April, 1887.

SIR,—I have the honor to transmit to you herewith an extract from the minutes of a meeting of the Finance Committee, held on the 28th instant, relative to the question of the floods at Montreal.

I have the honor to be, sir, your most obedient servant,

CHAS. GLACKMEYER, City Clerk.

A. Gobeil, Esq., Secretary Department of Public Works, Ottawa.

EXTRACT from the Minutes of a meeting of the Finance Committee, held on the 28th April, 1887.

Submitted and read a letter from the secretary to the Department of Public Works at Ottawa, of date the 14th April, instant, calling upon the Corporation to pay their share of contribution towards the costs incurred by the Flood Commission.

Resolved, That whilst they are prepared to pay their contribution towards the costs of the Commission, as agreed upon, this committee, in the meantime, would like to know if the Commissioners, who were appointed, have any practical and effectual measures to offer, to prevent the inundations to which the city is periodically exposed, and how soon their report to that effect may be expected.

Ordered, That a copy of the foregoing resolution be transmitted to the Secretary

of the Department of Public Works at Ottawa.

Certified.

CHAS. GLACKMEYER, City Clerk.

Reference No. 77,222.

CHIEF ENGINEER'S OFFICE, OTTAWA, 18th May, 1887.

SIR,—The Mayor of Laprairie calls attention in No. 76,343 to previous applications made for harbor improvements at that place. These are well known to the Department, and the Minister has directed that a dredge be placed at Laprairie immediately for the purpose of removing the obstructing portion of bottom lying between the two channels at that place.

The Mayor also refers to the work that has been done for the protection of their village against inundations, and states that the continuation of the works is a matter

of the highest importance to the residents of the village.

Under date 14th of December last, I reported on an application of the municipal council of Laprairie, that steps be taken to prevent the periodical flooding of their village, and submitted a scheme for the prevention of the same, estimating the cost at \$5,000.

This scheme might be modified by the construction of that portion of the work shown on the plan accompanying No. 73,223 from the southern end of St. Ignace Street across the brook used as the main drain of the village and thence eastwardly along the old embankment of the disused railway which it appears has become the property of the village corporation. This embankment, with a sluice in the brook, would cost about \$1,250.

During the past year two ice breakwaters were constructed near the southern end of St. Ignace Street which were tested to their fullest capacity during the extreme high floods of the past spring, and the inhabitants of Laprairie agree in stating, that without these piers great destruction would have been done to their property—a large banquise de glace struck the small pier breaking the ice in pieces as it reached the top, without, however, stopping the current from carrying the banquise downwards, but when it got to the large pier it was stopped, and thus the village was saved.

I am, sir, your obedient servant, HENRY F. PERLEY, Chief Engineer.

A. GOBEIL, Secretary Public Works Department.

Reference No. 77,379.

CITY CLERK'S OFFICE, CITY HALL, MONTREAL, 21st May, 1887.

Sir,—I have the honor, by direction of His Worship the Mayor, to transmit to you herewith a memorandum of facts or points in connection with the recent interview at Ottawa between you and the delegates from this city on the subject of inundations.

I have the honor to be, sir, your obedient servant, CHAS. GLACKMEYER, City Clerk.

Sir HECTOR LANGEVIN, Minister of Public Works, Ottawa.

MEMORANDUM of points submitted by the flood delegation from Montreal to the Honorable the Minister of Public Works.

The delegation was composed of:

1st. Delegates from the City Council and Montreal Board of Trade.

2nd. Delegates from the Committee of citizens.

3rd. Delegates from the Harbor Commissioners.

The substance of the representations made to the Honorable the Minister were as follows:—

That the annual flood at the City of Montreal, produced by the overflow of the River St. Lawrence, always productive of serious damage to the city and adjoining counties, had of late, and particularly during the last two years, reached a height unprecedented in the history of the city, had caused incalculable injury to a considerable portion of the city and to its trade and railway communications, and inflicted much misery and hardship upon its inhabitants. That public opinion has been now thoroughly aroused in respect of this question; and that the welfare and progress of the city and of the adjoining counties, and their inhabitants, imperatively demand immediate protection from the recurrence of these disastrous floods.

That the City Council and the citizens are satisfied that the recommendations of the Commission of Engineers appointed to consider the subject in so far as they relate to the protection of the city, are in the main judicious, and that they should be carried out.

These suggestions consist in substance of the following:-

1. That a permanent dyke should be erected round the portion of the city lying south-west of the Lachine Canal, of a sufficient height to protect it from the incursions of the river.

2. That a sufficient temporary dyke should be erected along the front of the city lying north-west of the canal.

3. That a permanent dyke should be erected for the effectual and permanent

protection of the last mentioned portion of the city.

In addition to these representations of the Commission of Engineers, it is the conviction of the City Council and of a great majority of the citizens, and probably cannot be effectually disputed; that the flood is caused by the accumulation of ice below the city, which ice descends from the upper reaches of the river during the late autumn and early spring. The ice thus descending is intercepted by that formed in the calm water below the city, and gradually accumulates, raising the water during the winter to a very considerable height. And in the spring the additions made to it by the lower portions of the lake ice produce a barrier or dam, which throws back the water upon the city.

That elsewhere, experience has shown that under similar circumstances the detention of the ice in the upper reaches of a river, until the channel below them is clear, has been successful in preventing or mitigating floods; and that such a result might be obtained in the St. Lawrence by placing piers or booms at the foot of Lake St. Louis to retain the ice there until the channel below becomes clear. And it is believed that by this means, the counties adjoining Montreal, as well as the city

itself, would be protected.

That from the foregoing statement of the works to be done, it is obvious that they are of a very extensive character, and that they affect different interests which should in a due degree combine to obtain protection, and it was submitted to the Honorable Minister that these different interests and their respective obligations with regard to protection, might be roughly outlined as follows:—

The city to undertake immediately the construction of the dyke round the Point St. Charles section, and the construction of the temporary dyke along the front of

the city.

The city, with the co-operation of the Harbor Commissioners, and the assistance of the Government, to proceed with the erection of a permanent dyke along the front of the city, acting of course upon professional advice as to the mode of construction of such dykes.

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In speaking of the co-operation of the Harbor Commissioners, it was not suggested that they should undertake substantially the performance of or make any contribution to the construction of this dyke, but as it would probably be so constructed as to form the boundary between the territorial jurisdictions of the city and the Harbor Commissioners, it must necessarily affect them more or less. For instance, it is possible that it might be found that some part, or the whole, of the revetment wall would need rebuilding, and possibly that the line on which it is built might require to be changed in some degree, and it is also probable that the revetment wall might form to some extent the foundation of the dyke, and might indeed be an integral part of it, if the wharves should remain at their present level, or should not be raised as high as Commissioner Street.

In such a case, it is plain that the Harbor Commissioners and the city, would, from the very nature of their rights and interests, be obliged to co-operate in the work, and it is in this sense that the Harbor Commissioners were referred to in the representations made to the Honorable Minister. But at present, in consequence of the heavy charges on the harbor and shipping, caused by the necessity for the payment out of those charges of the interest on the Lake St. Peter debt, it is impossible for the Harbor Commissioners to undertake any new work for the benefit of the har-

bor or for its extension.

That in undertaking the construction of such large and extensive works as the above, the city would hope for the assistance both direct and indirect, of the Government.

That in other places subject to similar recurring calamities, Governments in

other countries had afforded such assistance.

That in the cities of Antwerp and Hamburg. where works of protection had been executed, the General Government and the local authorities, had contributed directly along with those cities, to the construction of the works required; and the levees and dykes for the protection of the city of New Orleans were constructed and maintained at the expense of the state.

That there are several special reasons for the interposition of the Government,

among which were mentioned the following, namely:-

The fact that it is probable that the floods have been aggravated by the deposit in the shallow waters below the city, of the dredgings from the harbor works; and this probability is strengthened by the fact that such dredgings have been stopped upon cor plaints of such a result.

That the River St. Lawrence is a navigable river under the jurisdiction and control of the Federal Government, and that important works to keep its waters

within their natural channel, should be federal works.

That the Federal Government own very large properties in the city of Montreal, which receive their protection from disasters, fires and other casualties at the expense of the city, and have the benefit of the city administration, but are wholly exempt from taxation; and that in the event of an extraordinary expenditure outside the ordinary administration of the city, being required for the general henefit, it would seem reasonable that the Government should contribute with other proprietors.

It was therefore suggested that the Government might assist directly in the construction of the works of protection, by contributing a sum of money which might represent the capital of what the Government as a proprietor in the city would be bound to contribute annually were it not for the exceptional law as to

exemption.

That it might undertake this season the construction of some work by means of piers and booms, or otherwise, to detain the ice formed in the upper reaches of

the river, until the lower channel should become clear.

That it would probably, as a matter of course, raise such portions of the banks of the canal as might be necessary in conjunction with the dykes, to exclude the entrance to the water by means of the canal, upon either side of it.

With reference to the Harbor Commissioners and the Lake St. Peter debt, atrong representations were made by the delegates in favor of the assumption of the

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debt by the Government. Many of the delegates pressed this assumption strongly, as well on public grounds, applicable to the whole Dominion, as on the ground that such assumption would strengthen the hands of the Harbor Commissioners in the performance of such work as might properly fall to their share in the course of operations for the protection of the city. And they referred to the arguments that had already been used by the delegation and by the press, without reference to the floods; resting upon the character of the work as being a Federal work, as much as one of the Federal canals, and enlarged upon the injustice of leaving the interest upon its cost a special charge upon the harbor and shipping of Montreal. And it was the unanimous opinion of the delegation that now was a fitting time to urge the assumption of this debt upon the Government, not only upon general grounds applicable to that proposition, but also for the reason that doing so, would enable the Harbor Commissioners to do what might be proved to be incumbent upon them in connection with the new works on the line of the harbor now urgently needed. Several of the speakers endeavored to make it clear that the representation of the delegation did not mean that the Harbor Commissioners should use the revenue which would be free by the Government's assumption of the debt in any work for the protection of the city, but merely that some expenditure would be necessary where any part of such work proved to be of such a character as naturally and necessarily to be constructed by the Barbor Commissioners.

The representations of the delegation might tersely be summed up as follows:—
1st. That the Government, as proprietor of property, should make a reasonable

contribution to the cost of the permanent dykes.

2nd. That the Government should cause means to be taken to retain the ice in the upper reaches of the river, and should raise the banks of the Lachine Canal wherever necessary.

3rd. That the Government should assume the Lake St. Peter debt.

The whole respectfully submitted.

J. J. C. ABBOTT,

Mayor. GEO. A. DRUMMOND,

President Montreal Board of Trade.

MONTREAL, 21st May, 1887.

Reference No. 77,829.

STATEMENT of Expenditure incurred by the Government, from 1st July, 1886, to 8th June, 1887, for Surveys and Experiments in connection with the Montreal Spring Floods, showing names of persons to whom payments were made and dates of such payments.

Date.		Amount.
August 10 October 6 November 19	T. C. Keefer, Chairman of Commission, on account of disbursements do do do do E. D. Lafleur, services as Engineer and travel and expenditure T. C. Keefer, Chairman of Commission, on account of disbursements	\$ cts. 1,000 00 3,000 00 184 60 3,000 00
1887. March 22 April 5 do 18		2,000 00 1,000 00 2,800 00 \$ 12,984 60

CERTIFIED COPY

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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.

The Committee of the Privy Council have had their attention called to a telegraphic despatch dated 28th June, 1888, from Lord Knutsford to the Governor General, calling His Excellency's attention to the Statute of the last Session of the Parliament of Canada, chapter 43, intituled: "An Act to amend the Law respect-

"ing the procedure in Criminal Cases."

The Minister of Justice, to whom the matter was referred, reports as follows:— In the year 1887 an Act was passed by the Parliament of Canada, having the same title as that now urder consideration (chapter 50), amending the procedure in criminal cases for appeals to the Supreme Court of Canada, and enacting that the judgment of that court should, in all cases, be final and conclusive, and enacting that " notwithstanding any royal prerogative or anything contained in the Interpretation Act, or in the Supreme and Exchequer Courts Act, no appeal should be brought in any criminal case from any judgment or order of any court of Canada to any Court of Appeal established by the Parliament of Great Britain and Ireland, by which appeals or petitions to Her Majesty in Council may be ordered to be heard."

In a despatch from Lord Knutsford to your Excellency's predecessor, dated 1st May last, His Lordship stated in effect that he was advised that that Act (chapter 50, of 1887) did not affect Her Majesty's preregative, or prevent Her Majesty from entertaining appeals in criminal cases, and from referring them to the Judicial Committee of the Privy Council.

Prior to the receipt of that despatch the undersigned, whose attention had been called to the fact that the construction that was afterwards suggested by Lord Knutsford might be given to the Act (chapter 50) of 1887, had the honor to introduce in Parliament the Bill which was afterwards enacted as chapter 43 of 1888, and in relation to which enquiry is made in the despatch from the Secretary of State for the Colonies, dated 28th June last.

This Act was assented to before the receipt by Lord Lansdowne, of Lord Knutsford's despatch of the 1st May last, suggesting that chapter 50 of 1887, would probably be construed as not affecting the royal prerogative, and indicating that a Statute intended to affect the prerogative should be reserved for the signification

of Her Majesty's pleasure.

The object which Parliament had in view in enacting the Statute of 1888 (and, indeed, the intention in passing the Statute of 1887), was undoubtedly to make it clear that no right existed in Canada to appeal to Her Majesty in Council in a criminal case, and the undersigned would offer the following observations as to the policy and constitutionality of the Act:

The provision which Parliament has made in regard to appeals in criminal cases, other than to Her Majesty in Council, is to be found in the former of the

Statutes, above mentioned, chapter 50 of 1887, and reads thus:—

APPEALS AND NEW TRIALS:

"268. Any person convicted of any indictable offence or whose conviction has been affirmed before any Court of Oyer and Terminer or Gaol Delivery, or before the Court of Queen's Bench in the Province of Quebec, on its Crown side, or before any other Superior Court having criminal jurisdiction, whose conviction has been affirmed by any court of last resort, or, in the Province of Quebec, by the Court of Queen's Bench, on its appeal side, may appeal to the Supreme Court against the affirmance of such conviction; and the Supreme Court shall make such rule or order therein, either in affirmance of the conviction or for granting a new trial, or otherwise, or for granting or refusing such application, as the justice of the case requires, and shall make all other necessary rules and orders for carrying such rule or order into effect: Provided, that no such appeal shall be allowed if the court affirming the conviction is unanimous, or unless notice of appeal in writing has been served on the Attorney General for the Province within fifteen days after such affirmance.

"2. Unless such appeal is brought on for hearing by the appellant at the Session of the Supreme Court, during which such affirmance takes place, or the session next thereafter, if the said court is not then in session, the appeal shall be held to

have been abandoned, unless otherwise ordered by the Supreme Court:

"3. The judgment of the Supreme Court shall in all cases be final and con-

clusive:

"4. Except as hereinbefore provided, a new trial shall not be granted in any oriminal case, unless the conviction is declared bad for a cause which makes the former trial a nullity, so that there was no lawful trial in the case: but a new trial may be granted in the cases of misdemeanour in which by law new trials may now be granted."

This provision is now the law of Canada.

It does not differ materially from the enactments contained in the Revised Statutes on the same subject, sections 38, 68, 69 and 71 of chapter 135, and section 265 of chapter 174. Its effect is certainly to take away in criminal cases all appeals, excepting such as may be permitted by Her Majesty on special application to the Judicial Committee of the Privy Council, and there may be ground for contending that even the exercise of the prerogative in that regard would be restrained by the operation of these Statutes.

On the latter point, however, it is unnecessary at this time to present any argu-

ment.

The undersigned proceeds, therefore, to call attention to the policy which sustains the Act of last Session, on which the views of Your Excellency's advisers have been asked.

There can be no doubt that the tribunals by which the criminal law is administered in Canada afford the fullest opportunity that can reasonably be desired for the examination of every question of law and of fact which a criminal case can present. These tribunals are organized as the courts of England are, and the procedure in criminal cases, as well as the substantive criminal law, is almost an exact copy of the law of England in regard to such matters.

The qualifications required of those who preside in such tribunals are the same as those required in Great Britain and the zeal and learning of the practitioners are certainly no less than those which characterize the legal profession in any part of

the Empire.

To the present day no appeal from a conviction in Canada has been prosecuted

with success before the Judicial Committee of the Privy Council.

There seems, therefore, reason why, in regard to this subject, Canada should be permitted, as her Parliament has declared her desire to be permitted to regulate the administration of the criminal law without the intervention of Her Majesty's prerogative.

Appeals in criminal cases to such a remote tribunal are attended with, or at least admit of such delays that they may be made use of at any time merely to

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obstruct the enforcement of the criminal law, and their effect, even though unsuccess. ful, is greatly to weaken the authority of the law and to lessen the respect and fear which it is necessary to maintain in regard to its primitive provisions.

The Judicial Committee has itself declared its appreciation of this view.

In the case of "The Falkland Islands Company vs. The Queen" (I Morris, P. C. C., N.S., 312) Lord Kingsdown, in giving the judgment of the Committee on the

application for leave to appeal in a criminal case, said:

"It may be assumed that the Queen has authority, by virtue of her prerogetive. of reviewing the decisions of all colonial courts, whether the proceedings be of a civil or criminal character, unless Her Majesty has parted with such authority. But the inconvenience of entertaining such appeals in cases of a strictly criminal nature is so great, the obstruction that it would offer to the administration of justice in the colonies is so obvious, that it is very rarely that applications to this board similar to the present bave been attended with success."

In the case of the Queen vs. Joy Kissen Moo-Kergee (I Moore P.C.C., N.S., 295)

the Right Honorable Dr. Lushington, in giving judgment, said:

"With regard to the merits of the case itself their Lordships are certainly inclined to come to the conclusion that justice has not been very well administered in this case, and supposing it to have been a civil and not a criminal case they would have had no hesitation whatever in recommending to Her Majesty to allow an appeal for the purpose of considering these proceedings and of doing justice to the party complaining. But this is a criminal case and subject to very different considerations.

"Admitting therefore two things-admitting the existence of the prerogative of the Crown, and admitting that this prima facie and presumptively, is a case of great grievance, their Lordships have now to determine whether, looking at all the circumstances attending the granting of appeals in criminal cases, it would be their

duty to advise Her Majesty to grant this appeal or to withhold it.

"We must recollect in the first place that by granting an appeal is meant an

examination of the whole of the proceedings which have taken place.

"It is not simply for the investigation of any legal question which might have arisen, it is for the purpose of examining the whole of the evidence and the whole course of the proceedings upon the trial to enable us to come to a conclusion upon the merits.

"Now, it is of no small importance to bear in mind that, notwithstanding the numberless instances in which an application of this kind might have been made to the Queen in Council, from all the various dominions subject to Her Majesty, from all parts of those dominions that were acquired by conquest, and where Her Majesty has the entire sovereign power of legislating as she may think fit, either by Order in Council or, as was determined on a former occasion, by virtue of letters from the Secretary of State, it is, I say, to be borne in mind, that in no instance whatever of any grievance however great, at any time, has any attempt ever been made to apply to Her Majesty for leave to appeal in a criminal case.

"We can easily call to memory very many instances which have occurred in the colonies in which it has been alleged that gross injustice has been done, and even lives sacrificed where they ought not to have been exposed to any danger, but no precedent of any appeal of this nature has existed, and we think it is obvious upon the least consideration of the consequences, how it is that no such precedent would have been created, even if an attempt had been made to call into force the power of

the Crown.

"It may be true that on some occasions it is not very desirable to argue simply from consequences alone, but the consequences of granting an appeal in cases of this description are so exceedingly strong, they are so entirely destructive of the administration of all criminal jurisprudence, that we cannot for a single moment doubt that they are of the greatest importance in guiding us to form a judgment.

"Now, if we are to advise Her Majesty to grant an appeal on this petition, how would the case stand? It is simply the case of an individual having been convicted

of causing documents to be forged.

"Would not the same right apply to capital cases? What could be done in a capital case? Is there any distinction which can be drawn? If the prerogative of Her Majesty gives this individual the right of appeal, could any rules or regulations be imposed whereby the right of appeal could be governed, or could be restricted? So you would go through the whole catalogue of cases, and there is no doubt whatever that whenever punishment was likely to ensue, there would follow an appeal to Her Majesty in Council, and consequently, not only would the course of justice be maimed, but in very many instances it would be entirely prostrated.

"These are the reasons which operate upon our minds in rejecting this application-not at all forgetting that injustice may have been done in this individual case, and not at all forgetting that the power of the Crown may be invoked in another shape, and that that injustice may be remedied. Their Lordships are of opinion that they cannot, under the existing circumstances, advise Her Majesty to admit this right of appeal, but they doubt not that justice will be done, because they would suggest that an application should be made to the constituted authorities who

have the power to afford a remedy, though in a different way.

"They doubt not that when it is represented to those authorities that this suggestion emanates from the Judicial Committee, they will not be loth to examine into the circumstances of the case, and to do that which justice may require."

The same judge said in the case of "The Queen vs. Eduljee Byramjee" (5

Moore's P. C. C. 290):-

"But if the Crown has really, by this charter, reserved to itself the right of granting an appeal in such cases, what are the inevitable consequences? execution to be done would be in effect to prevent the right of granting an appeal vested in the Crown, and to take away from the prisoner convicted, the right of laying his case before his sovereign, and of obtaining a reconsideration of it.

"For it must be remembered, that if a reconsideration by way of appeal be reserved to the Crown, the right of applying for it must be reserved also. But if this were really the state of the law, we doubt whether any court, or any authority would think itself justified in ordering execution to be done till there had been an opportunity given to the prisoner of applying to the Crown for a reconsideration of the case according to the right reserved to the Crown and the prisoner. Many very evil consequences must follow necessarily in this state of things. A long period must elapse before an application to the Crown could be made, and its decision could be known, and eventually, where the leave to appeal was refused (and it must be presumed that this would generally be the case), execution would follow the sentence after so long an interval, that all benefit to be expected from a public example would be lost; and to this it may be added that in a great majority of cases the convicts themselves would be kept in a state of miserable suspense to suffer in the end the same ignominious death to which they were sentenced."

In a country like Canada comprising an area of three and a half million square miles, with seven Provinces, besides the great Territories, each possessing a fully organized indicial system, and with a Supreme Court of Appeal from all, the inconveniences and obstructions which have been so justly described in the foregoing citations may be felt in a greater degree than in a colony differently situated. Were it generally supposed that an appeal to Her Majesty in Council would lie in all criminal cases such appeals would be directed in capital cases merely for the sake of delay, after every other effort to obtain commutation or respite had been exhausted; and

indeed this has actually been attempted in several instances.

The undersigned believes that no difficulty can arise on the question as to whether such a statute as the one under review is within the competence of the Parliament

of Canada.

The British North America Act recites that "The union of the Provinces into one Dominion under the Crown with a constitution similar in principle to that of the United Kingdom, would conduce to the welfare of the Provinces and promote the interests of the Empire." It enacts that (sec. 9) "The executive government and authority of and over Canada is vested in the Queen." That (sec. 17) "There shall

be one Parliament for Canada, consisting of the Queen, the Senate and the House of Commons." That (sec. 55) "The Governor may assent to a Bill in the Queen's name." That (sec. 91) "It shall be lawful for the Queen by and with the advice and consent of the Senate and House of Commons, to make laws for the peace, order and good government of Canada in relation to ." (Sub sec. 27) "The criminal law, except the constitution of courts of criminal jurisdiction, but including the procedure in criminal matters"; and that (sec. 101) "The Parliament of Canada may provide for the constitution, maintenance and organization of a general Court of Appeal for Canada for the better administration of the laws of Canada."

It is submitted that this Act gives to the Parliament of Canada in respect to the subjects of Her Majesty in Canada, and in relation to the matters upon which it is authorized to legislate, powers of legislation as full and complete as those possessed by the Imperial Parliament, subject only to the power of disallowance by Her Majesty, a power which was doubtless reserved in order to maintain such control as might be necessary in matters strictly of Imperial policy, and not with a view of abridging the large measure of self-government which was intended by the conferring of a constitution "similar in principle to that of the United Kingdom."

Her Majesty's prerogative in Canada can be as effectually relinquished by an enactment made by Her "with the advice and consent of the Senate and House of Commons of Canada," as Her prerogative in Great Britain can be by enactment made by her "with the advice and consent of the Lords Spiritual and Temporal and

Commons" assembled in England.

A great number of the Statutes passed by the Legislature in a colony must (and a great number of the statutes of Canada do), necessarily restrict the royal prerogative; the establishment of courts, especially such a Court of Appeal as the Supreme Court of Canada, having finality given to so many of its decisions, the regulation of the appointment of judges and their jurisdiction and of Ministers of the Crown, the conferring of powers on the latter to act in Her Majesty's name, the regulation of procedure in courts of justice, the regulation of procedure on petition of right, the statutes relating to Crown lands, and franchises, and to the public revenue, and as to the disposition of fines and forfeitures, and the remission of penalties and as to pardons, are instances which may be recited among hundreds of enactments affecting the royal prerogative as clearly as the Act in question does, although perhaps not to so great an extent.

It would seem that in several cases the Judicial Committee has at least by implication recognized the power of a Colonial Legislature by apt words to take away all appeals to Her Majesty in Council. The cases of Cuvillier vs. Alwyn (2 Knapp P. C. R. 72), and In re Lewis Marvis (15 Moore P. C. C. 189), Johnston vs. W. Andrews Church (3 Appeal cases, 159), and Cushing vs. Dupuy (5 Appeal Cases,

409), illustrate this view.

Although this branch of the subject admits of great elaboration, the undersigned forbears to discuss it more fully at present, and indeed would not have adverted to it were it not that the correspondence which has taken place with your Excellency with regard to this statute does not indicate what difficulties may have been present in the mind of Lord Knutsford when he requested a statement of the grounds on which it was expected that the Act should be left to its operation.

The position seems equally clear that this statute is within the sphere of the

Canadian Parliament as marked out by the British North America Act.

It is one of the "laws for the peace, order and good government of Canada," it is a statute affecting the "criminal law," and it is likewise a statute relating to the "constitution, maintenance and organization of a General Court of Appeal for Canada."

The extent of the powers conferred even by the authority to make "laws for the peace, order and good government of Canada" may be illustrated by a reference to the case of Riel vs. Regina (10 Appeal Cases, 675), in which the Lord Chancellor points out that these words: "are apt to authorize the utmost discretion of enactment. They are words under which the widest departure from criminal procedure.

as it is known and practised in this country, have been authorized in Her Majesty's Indian Empire. Forms of procedure unknown to the English Common Law have there been established and acted upon, and to throw the least doubt upon the validity of powers conveyed by those words would be of widely mischievous consequence."

The Committee, concuring in the report of the Minister of Justice, recommend that Your Excellency be moved to forward a copy hereof to Her Majesty's Principal Secretary of State for the Colonies, in response to the request contained in his

despatch before referred to.

All of which is respectfully submitted for Your Excellency's approval.

JOHN J. McGEE, Clerk Privy Council.

(Lord Knutsford to Lord Stanley.)

DOWNING STREET, 12th February, 1888.

My Lord,—I have the honor to inform you that Her Majesty will not be advised to exercise her power of disallowance with respect to the Act passed in the last Session of the Parliament of Canada, entitled: "An Act to further amend the Law respecting Procedure in Criminal Cases."

I have, &c.,

KNUTSFORD.

Governor General, the Right Honorable Lord Stanley of Preston, &c., &c.