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In Sessional papers No. 5, Supplement No. 4, pages 42 & 161 are incorrectly numbered pages 4 & 61.

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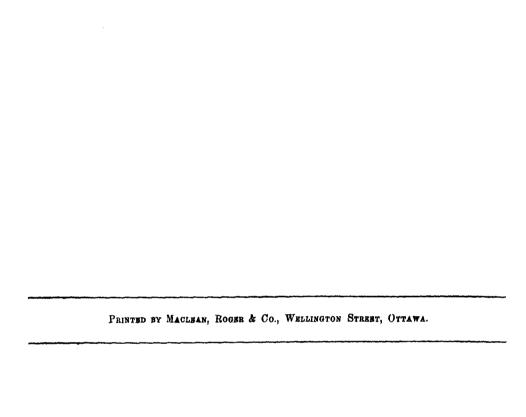
SECOND SESSION OF THE THIRD PARLIAMENT

OF THE

DOMINION OF CANADA.

SESSION 1875.





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No. 5	MARINE AND FISHERIES:—Seventh Annual Report of the Department of, for the year ended 30th June, 1874, together with five Supplements.
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	Statements of Receipts and Expenditure in connection with Sick and
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	cayed Pilot Fund.
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No. 7	PUBLIC WORKS:—General Report of the Minister of Public Works, for the fiscal year ending 30th June, 1874.

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- No. 10 ... LIBRARY OF PARLIAMENT :- Report of the Librarian on the state of.
- No. 11.... LEPINE, AMBROISE:—Correspondence, and further correspondence relating to the commutation of the sentence of death passed on Ambroise Lepine for the murder of Thomas Scott at Fort Garry
- No. 13... Geological Survey of Canada:—Report of Progress of, by Alfred R. C. Selwyn, F.R.S., F.G.S., Director, for 1873-74. [Not re-printed for Sessional Papers.]
- No. 14... Superannuation:—Return to Address, Showing the Allowances and gratuities granted under the Act 33 Vic., cap. 4, since the beginning of the year 1874, the grounds of superannuation, the age of each person superannuated, the names and ages of the persons appointed to succeed the person so superannuated, and the offices and salaries held by such successors respectively.

Statement of all allowances and gratuities granted under the Act 33 Vic., cap. 4, with statement of the cases in which (since last Return) additions have been made to the actual number of years services of persons employed in the Civil Service, who have been superannuated.

- No. 15... UNFORSEEN EXPENSES:—Statement of Expenditure charged to Unforseen Expenses, under Orders in Council, by authority of the Act 37 Vic., cap. 1, Schedule B, from 1st July, 1874, to date.
- No. 16... "BAVARIAN":—Return to Address, Correspondence concerning the destruction by fire of the Steamboat "Bavarian," in November, 1873. [Not printed.]
- No. 17... Chaloner, H. J.:—Return to Address, Correspondence, &c., in reference to the dismissal of Mr. H. J. Chaloner of Quebec, as Shipping Master. [Not printed.]
- No. 18... Pilots:—Return to Address, Correspondence between the Government, and any other person or persons in reference to the appointment of Commissioners of Pilots. Also in reference to the dismissal of Mr. Hamilton, as Collector of Customs at North Sydney. [Not printed.]
- No. 19... BRITISH COLUMBIA,—TERMS OF UNION:—Correspondence on the subject of the non-fulfilment of the terms of Union with the Province of British Columbia.
- No. 20... MARINE ELECTRIC TELEGRAPHS:—Message,—Correspondence which has taken place with Her Majesty's Government on the subject of a Bill passed in the last Session of the Dominion Legislature, entitled: "An Act to regulate the Construction and Maintenance of Marine Electric Telegraphs."
- No. 21... Morden, Wm. J.:—Return to Address, Copies of all correspondence connected with the appointment of Wm. J. Morden, as Postmaster for the Village of Greensville, in the County of Wentworth, and the removal of said office to Bullock's Corners. [Not printed.]
- No. 22... Banks: —List of Shareholders of the several Banks of the Dominion of Canada, in compliance with the Act 34 Vict., cap. 5, sec. 12.
- No. 23... Statutes of Canada:—Official Return of the distribution of the Statutes of the Dominion of Canada, being 37 Victoria, 1st Session of the 3rd Parliament, 1874, under the provisions of the Act 31 Vict., cap. 1, sec. 14. (English and French versions.) [Not printed.]
- No. 24... Fortifications, &c., Transferred:—Return (in part) to Address, Statement of the Fortifications, Lands and Material of War, which were transferred to the Government of this country by the Imperial Government; also a Report of a competent officer on the state of repair of the several Forts and Buildings so transferred, and of the condition of the Material of War; also a return of such properties as have been conveyed to Municipal Corporations, if any; or of any lands that it is proposed by the Government to transfer to such Corporations. [Not printed.]
- No. 25... MILITIAMEN, 1812-13:—Return to Address, Statement showing names, ages and places of residence of all Militiamen of 1812-13, who have applied to the Imperial Government through the Department of Militia and Defence for a pension, or indemnity.

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 NIAGARA FRONTIER:—Return to Address, Copies of all Reports, Orders and correspondence between the Militia authorities and the Militia or any other Department, in reference to the Military movements on the Niagara Frontier, in the year 1866. [Not printed.]

 No. 27...

 Bell, L. G.:—Return to Address, Copy of the Report of L. G. Bell, C.E., on the exploration made of the route of the Huron and Ottawa Railway from Ottawa City to Parry Sound; together with all maps or papers accompanying the same.

 No. 28...

 Copyrights:—Return to Address, Coprespondence relating to Addresses of this House, presented last Session to the Governor General on the subject of the Act respecting Copyrights, which Act was reserved for the signification of Her Majesty's pleasure thereon.

 —Return to Address, Copies of Despatches and other communications which have passed singe the 31st March, 1874, on the subject of an Act respecting British Copyright Works passed in the Session of 1872, and reserved for Her Majesty's pleasure thereon.

 No. 29...

 Governor General:—Return to Address, Copy of His Excellency the Governor General's Commission; and of the Royal Instructions which accompanied the same.

 No. 30...

 Gypsum, Ground:—Return to Address, Ist. The entire quantity of ground gypsum, or land plaster imported into the Dominion of Canada from the United States, since the 1st day of April, 1874; 2nd. For the respective quantities of said ground gypsum, or land plaster, imported from the United States as received at the several Lake and River Ports of the Dominion; 3rd. For the entire sum collected as revenue from the said article of ground gypsum, or land plaster, between the 1st day of April and the 1st day of December, 1874. [Not printed.]

 No. 31...

 Baptisms, Marriages and Burials:—General Statement of, for certain districts in the Province of Quebec, for the year 1874. [Not printed.]

 No. 32...

 Fish Inspectors:—Return to Address, Number of Counties in Nova Scotia and New Brunswick in which Examiners of Fish Inspectors have b
 - No. 33... Aliens, Naturalization of:—Return to Address, Copies of any Despatch or Despatches, received from the Imperial Government on the subject of the Naturalization of Aliens, since the Despatch of the Earl of Kimberley, of date the 3rd September, 1873. [Not printed.]
 - No. 34... RICHIBUCTO HARBOR, N.B.:—Return to Address, Copy of contract for the removal of wrecks at the entrance of Richibucto Harbor in New Brunswick; with the names of the sureties and sums paid on such contract; also copy of Report of Engineer, or other officers, of work performed, on which Report payment was made. [Not printed.]
 - No. 35... OLIVER'S FERRY:—Return to Address, Orders in Council, correspondence and papers in reference to the construction of a Bridge over Oliver's Ferry. [Not printed.]
 - No. 36... Welland Canal:—Return to Address, List of persons to whom contracts have been awarded for the construction of the several sections of the works now in progress, or hereafter to be commenced on the Welland Canal, for which tenders have been received, with the names of their sureties; also a list of the tenders made for the same, specifying the names of persons so tendering, the sections for which they severally tendered, and the amount of each tender.

Return to Address, Copies of all Estimates and Reports of the Engineers in charge of the Welland Canal, shewing the cost of removing the rock bottom at Raney's Bend, with a view to obtaining Lake Eric level. [Not printed.]

- No. 37... Dawson Road:—Return to Address, Statement of the number of Emigrants conveyed over the Dawson Road to Manitoba, since the opening of the said Road; also the cost of conveyance of such Emigrants to Manitoba, shewing the average cost of each person, so carried.
- No. 38... Johnston, Mr.:—Return to Address, Instructions furnished by the Department of Public Works to one Mr. Johnston, for the survey of that portion of the Ottawa River lying between the foot of Paquette's Rapids and Head of Allumette Island; also copies of all plans of said survey, with Mr. Johnston's report thereon, together with the estimated cost of improving the navigation at Paquette's Rapids and Allumette Rapids, so as to admit of the passage of steamers, and the scale of prices upon which such estimate of cost is based. [Not pristed.]
- No. 39... THUNDER BAY, &c.:—Return to Address, Copies of all tenders and correspondence relating to the contract for carrying passengers and freight between Thunder Bay and Fort Garry, with the names of parties tendering, and amount of bonus asked; the rate per head to be charged for passengers, and the rate per ton for freight, &c.

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- No. 40... AGRICULTURE:-Report of the Minister of Agriculture for the year ending 31st December, 1874.
- No. 41... ELECTIONS, RECORDS OF:—Return shewing—1st. The vacancies that have occurred in this House since the last General Election; the date when each vacancy took place; and when the same was notified to Mr. Speaker. 2nd. The date of the Warrant of Mr. Speaker for a new Writ in each case. 3rd. The date of the issue of the Writin each case. 4th. The date of the transmission of the Writ to the Returning Officer in each case. And also a similar statement respecting the vacancies occurring during two last Parliaments. [Not printed.]
- No. 42... Bank of Upper Canada :--Statement of the Estate of the Bank of Upper Canada, on the 31st January, 1875.
- No. 43... RECEIPTS AND PAYMENTS:—Statement of the Receipts and payments of the Dominion of Canada, from 1st July, 1874, to the 20th February, 1875.
- No. 44... CANADIAN PACIFIC RAILWAY:—Articles of Agreement entered into between Asa Belknap Foster and Her Majesty Queen Victoria, for the construction and working of the Georgian Bay Branch of the Canadian Pacific Railway, bearing date the 27th February, 1875; accompanied by a copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council, on the 4th November, 1874, in relation thereto.

Return to Address, All tenders for the construction of the Georgian Bay Branch of the Canadian Pacific Railway, with Orders in Council, correspondence, and all papers relating thereto.

Return to Address, Memorandum of the Chief Engineer of the Canadian Pacific Railway, referred to in a Report of the Honorable the Privy Council, approved by the Governor General on the 7th June, 1873.

- No. 45... POSTAL CONVENTION:—Return to Address, Copies of the Postal Convention recently made with the Postmaster General of the United States by the Postmaster General of Canada.
- No. 46... Manitoba, Militia Volunteer Force in :--Return to Address, All applications made by persons who served in the Militia Volunteer Force in Manitoba, and who have been invalided or discharged before the termination of enlistment, for grants of land in that Province.
- No. 47... CIVIL SERVICE EMPLOYÉS, DOMINION:—Return to Address, Statement shewing the number of Employés in each Department of the Civil Service of the Dominion, giving the name of each Employé, and his age, when first appointed to the Service; also his occupation prior to his said appointment, and the country in which he was born. [Not printed.]
- No. 48... St. Lawrence River Navigation:—Report of John Page, Esq., Chief Engineer of Public Works, on the Navigation of the River St. Lawrence, between Lake Ontario and Montreal.
- No. 49... St. Lawrence Tow Boat Co.:—Return to Address, Correspondence between the Government and the St. Lawrence Tow Boat Company, on the subject of the leasing of the Wharves below Quebec; also Statement shewing the sums collected as wharfage dues established by the Départment of Public Works and the sums paid to the Government for each of the said Wharves.
- No. 50... INSUBANCE:—Statements made by Insurance Companies, in compliance with the Act 31 Vic., cap. 48, sec. 14.
- No. 51... RECIPROCITY TREATY:—Return to Address, Papers in connection with the negotiations with the Government of the United States for a Treaty of Commercial Reciprocity.
 - Supplementary Return to Address, Papers in connection with the negotiation of a Treaty of Commercial Reciprocity with the United States.
- No. 52... INTERCOLONIAL RAILWAY:—Return to Address, Copies of all special rates granted for freight on the Intercolonial Railroad.
 - Return to Address, All papers and correspondence connected with the contract for supplies to the Intercolonial Railroad, from the 1st June to the 31st December, 1874, of Cars, Trucks, Bar Iron and Railway materials.

Return to Address, Statement in detail of the several amounts paid out by the Government for work actually performed on Section 16 of the Intercolonial Railway from the time the work was taken out of the hands of the Contract or until the present time, &c., stating in detail the grounds for paying the same, and whether the amounts so paid (if any) were sanctioned by the Contractor before payment; also, any report of the officer in charge of said work; also, a statement in detail of all qualities of all work performed in Earth, Rock and Masonry, on Section 16 of the Intercolonial Railway since that section was taken out of the hands of the Contractor, &c.

- No. 52... Intercolonial Railway:—Return to Address, A comparative statement of the number of tons of freight, not to include Government freight, carried over the Intercolonial Railway in Nova Scotia and New Brunswick during the months of October, November and December, in the years 1873 and 1874, and the months of January and February, 1874 and 1875, respectively; together with the average distance carried, the average rate received per ton, and the average rate per mile per ton. [Not printed.]
- No. 53... GATINEAU RIVER:—Return to Address, Copies of all advertisements, tenders, contracts, reports, and all other correspondence as well as all affidavits, in connection with the construction of booms, piers, and other works on the Gatineau River last winter.
- No. 54... Accidents on Railboads:—Return to Address, Statement of the number of persons killed or injured on the different Railroads of Canada. [Not printed.]
- No. 55... PRINCE EDWARD ISLAND RAILWAY CONTRACT:—Return to Address, Correspondence between the Dominion Government and the Government of Prince Edward Island, concerning the contract for the construction of the Railway on the Island, and handing over the same to the Government; and also all correspondence between the contractors, the Local Government or the Dominion Government, or either of them, regarding the substitution of Wire fencing for the fencing provided for in the contract. [Not printed.]
- No. 56... Indians, Mississagua, The:—Return to Address, Returns respecting that portion of the Mississagua Indian Tribe now settled upon Scugog Island. 1st. For the amount invested by the Dominion Government on their behalf in the lands which said Indians now occupy; 2nd. For the amount of all other funds originally received from and invested in behalf of said Indians, with the several annual additions thereto:—showing how said funds are invested; at what rate of interest; and the several annual payments or donations made by Government to them since the first receipt and investment of said funds in the Indians' behalf. [Not printed.]
- No. 57... King, James, of Halifax, N.S.; —Return to Address, Copy of the contract entered into between James King, Esq., of Halifax, N.S., and this Government, for the purpose of running a steamer between Georgetown, P.E.I., and Pictou, N.S., during the winter season.

 Supplementary Return:—Copy of the advertisement calling for a winter steamer at Prince Edward Island, and also for a copy of the contract entered into for the performance of said service. [Not printed.]
- No. 58... Shortest Route to Europe:—Report of Special Committee of the House of Commons, appointed to enquire into the shortest route to Europe.
- No. 59... JUDGES, PROVINCE OF QUEBEC:—Statement of payments to the Judges of the Province of Quebec, on account of travelling expenses, from 1st July, 1867, to 30th June, 1874.
- No. 60... FINANCIAL STATEMENT:—Return to Address, Statement of all monies lying at the credit of the Dominion in any Bank or in the hands of any Financial Agent or other person, on the 20th day of February last, stating specifically the names of the Banks, Financial Agents or other persons, with whom such monies are deposited, and whether on interest or otherwise, and the rate of interest allowed in each case.
- No. 61... "LAND PURCHASE BILL, 1874," P.E.I.:—Return to Address, Correspondence which may have passed between the Government of the Dominion and the Local Government of Prince Edward Island and with the Imperial Government and the landed proprietors, relating to a Bill passed by the Local Legislature of that Province, to be entitled "The Land Purchase Bill of 1874."
- No. 62... Hamel, J. A.:—Return to Address—1st. Copies of all documents relating to the appointment of J. A. Hamel, Esquife, of Malbaie, Physician, to vaccinate the Indians on the North Shore of the River St. Lawrence for the years 1868 and 1869; of the instructions furnished to him, and of the reports made by him during the said two years on the subject. 2nd. A statement shewing the number of Indians vaccinated by the said J. A. Hamel during the said two years; the accounts furnished by the said J. A. Hamel, and the amount of money paid to him by the Government for the services rendered. 3rd. Copies of all communications sent to the Government by the Reverend Father Arnault and others, during the said years 1868 and 1869 in relation to the said J. A. Hamel. [Not printed.]
- No. 63... Kitson Line:—Return to Address, Copies of all Orders in Council or other authority granted to certain American Steamboat proprietors, known as the "Kitson Line," to trade on the Red River, in the Province of Manitoba, &c. [Not printed.]
- No. 64... GRAVING DOCK, ESQUIMAULT:—Return to Address, Copies of all correspondence with the Government of British Columbia, or with any person on behalf of that Government, respecting the construction of a first class Graving Dock at Esquimault.

- No. 65... REGISTRY DIVISION, MONTREAL:—Return to Address, Copy of the Bill passed in the last Session of the Legislature of the Province of Quebec, intituled: "An Act to divide into three parts the Registry Division of Montreal." [Not printed.]
- No. 68... CHICOUTIMI AND SAGUENAY, SQUARE TIMBER:—Return to Address, Statement shewing the number of pieces of square timber, spars, masts, deals and boards exported, from the month of April, 1874, up to this date, from the Counties of Chicoutimi and Saguenay, &c.
- No. 67... Spring Hill Mining Co.:—Return to Address, All correspondence between the Government, or their officers, and the Spring Hill Mining Company, for all Orders in Council relating to the said Company; and any agreements that may have been made with the same.
- No. 68... Prince Edward Railway, Construction or:—Return to Address, Copies of all papers and correspondence between the Dominion Government and the Prince Edward Island Government, relative to the construction of the Prince Edward Railroad, and the transfer of said Railroad to the Dominion Government. [Not printed.]
- No. 69... COAL, COKE, &c., N.S. & N.B.:—Return to Address, Shewing the quantity and value of Salt, Coal, Coke, Wheat, Corn and other grains; Wheat and Rye Flour and Meal exported from, and imported into the Provinces of Ontario, Quebec, Nova Scotia and New Brunswick, from the 7th April, 1870, to the 1st April, 1871, with the amount of duties collected on these articles at each Port of Entry. [Not printed.]
- No. 70... HARBORS, PIERS AND BREAKWATERS:—Return to Address, Shewing the amount expended by the several Local Governments on all Harbors, Piers, and Breakwaters in the Dominion, prior to 1867, and since July, 1867, by the Dominion Government, and also the amounts expended on all such works by any local Companies, Municipal Authorities, Railway Companies, Harbor Commissioners, or any other Companies or persons, before or since July 1st, 1867.
- No. 71... OTTAWA RIVER, SLIDES, DAMS, &C.:—Return to Address, Shewing the sums expended on capital account as well as the amounts chargeable to income, in the construction of Slides, Dams, Piers, Booms and other works, to facilitate the passage of Timber and Saw Logs on the Ottawa River and its tributaries, up to 31st December last.
- No. 72... LACHING CANAL:—Return to Address, Copies of all correspondence, letters or telegrams between the Government and the proprietors of land in the vicinity of the proposed enlargement of the Lachine Canal, from 1st March, 1874, to the 1st March, 1875, &c., &c.
- No. 73... CIVIL SERVICE EMPLOYÉS, P.E.I.:—Return to Address, A complete Return of all dismissals from, and appointments to, the Civil Service of Prince Edward Island, as well as the salaries attached thereto. [Not printed.]
- No. 74... Customs and Excise:—Return to Address, Receipts from Customs and Excise for the months of May and October, in the year 1874. [Not printed.]
- No. 75... CHATHAM BRANCH RAILWAY:—Return to Address, Copies of all correspondence, memoranda, propositions, Reports to Council and Minutes of Council in relation to aiding the Chatham Branch Railway, or in connection therewith. [Not printed.]
- No. 76... St. Peter's Canal:—Return to Address, Copy of the Report of Mr. Perley, C.E., on the enlargement of St. Peter's Canal. [Not printed.]
- No. 77... MARINE HOSPITAL, SYDNEY, C.B.:—Return to Address, All plans, correspondence, documents and tenders in possession of the Government, relative to the proposed erection of a Marine Hospital at Sydney, C.B., &c. [Not printed.]
- No. 78... ORDNANCE LANDS, FREDERICTON:—Return to Address, All papers, correspondence, telegrams or Orders in Council connected with the sale of certain Ordnance Lands at Fredericton, N.B., to the Fredericton Branch Railroad Company, or to Temple & Burpee, &c.
- No. 79... Quebec and Gulf Ports Co.:—Return to Address, All papers and correspondence, advertisements for tenders, if any, with terms of renewal or extension of subsidy to Quebec and Gulf Ports Company for service between St. Lawrence and Pictou, &c. [Not printed.]
- No. 80... HARBORS AND BREAKWATERS, P.E.I.:—Return to Address, Copies of the Reports of the Dominion Government Engineer appointed to survey and report upon Harbors and Breakwaters in Prince Edward Island. [Not printed.]
- No. 81... Supreme Court, N.B.:—Return to Address, All decisions made since the 1st of January, 1875, by the Supreme Court of New Brunswick, with reference to the jurisdiction of the Lecal Government or Municipal authorities in that Province in granting or withholding licenses for the sale, or regulating the sale, of spirituous liquors. [Not printed.]

- No. 82... PILOTAGE, AN ACT RESPECTING:—Return to Address, Correspondence with Boards of Trade or other parties, Minutes of Council, &c., in relation to the effect of an Act entitled "An Act respecting Pilotage," having reference to the effect upon Trade and Navigation of the said Law as effects collisions, and the responsibility of pilots and owners of vessels in such cases. [Not printed.]
- No. 83... Montreal Harbor Dues:—Return to Address, Copies of instructions given to Collectors of Customs in Ontario, to collect Montreal Harbor Dues on all freight landed at the Port of Montreal; also a statement of the rate of Dues so levied, and the principle on which they are computed. [Not printed.]
 - BRITISH MERCHANT SHIPPING:—Return to Address, All Papers and correspondence had with Her Majesty's Government in relation to the Legislation which was under the consideration of the Imperial Parliament in relation to British Merchant Shipping from 1871 to the end of 1874, in connection with the so-called Plimsoll movement; also in connection with the proposed Legislative measure in relation to merchant shipping at present proposed by Her Majesty's Government; also, all papers, Minutes of Council and despatches had between the Government of Canada and Her Majesty's Government, protesting against any Legislation being had by the Imperial Government which would affect Canadian shipping. [Not printed.]
- No. 85... CANADIAN PACIFIC RAILWAY, EASTERN TERMINUS:—Return to Address, Correspondence between the Canadian Government and the Government of the Province of Quebec, on the subject of Railway connections between the Eastern terminus of the Canada Pacific Railway, and the Province of Quebec. [Not printed.]
- No. 86... LUNENBURG, N.S.:—Return and two further Returns to Address, Copies of all letters in connection with appointments to, and resignations or dismissals from office, and the appointment of successors in the County of Lunenburg, Nova Scotia, since the 1st October, 1873. [Not printed.]
- No. 87... PENITENTIARIES: -- Seventh Annual Report of the Directors of Penitentiaries of the Dominion of Canada, for the year 1874.
- No. 88... British Columbia, Crown Lands:—Copies of Orders in Council relative to Acts of the Legislature of British Columbia. 1. "An Act to amend and consolidate the Laws affecting Crown Lands in British Columbia;" and 2. "An Act to make provision for the better administration of Justice, and as to their disallowance." [Not printed.]
- No. 89... BRITISH COLUMBIA STEAMSHIP Co.:—Return to Address, All correspondence or letters (if any) between the Government and the "British Columbia Steamship Company," relative to a subsidy for carrying the Mails between San Francisco and Victoria. [Not printed.]
- No. 90... IMMIGRANTS, MONTHEAL:—Return to Address, Any papers showing the number and condition of Immigrants now in the City of Montreal without employment. [Not printed.]
- No. 91... GRAVING DOCK, QUEBEC:—Return to Address, Copies of all papers, documents, letters and correspondence, having reference to the selection of the site for the construction of a Graving Dock in the Port of Quebec. [Not printed.]
- No. 92... RIDEAU CANAL:—Return to Address, Statement of Leases of Water Power made by the Department of Public Works between the Dominion Dam at the Whitefish and Kingston Mills on the Rideau Canal, both inclusive; date of leases; time such lease or leases expire; quantity of power rented and approximate power used during past year under each lease; with copy of reports and papers, if any, submitted by the Superintendent Engineer of the Rideau Canal during the past twelve months to the Department of Public Works on this subject. [Not printed.]
- No. 93... GREAT WESTERN RAILWAY Co.:—Copies of correspondence and accounts in re duties refunded to the Great Western Railway Company. [Not printed.]
- No. 94... MILITIA SERVICE EXPENSES:—Return to Address, Statement of all sums of money expended in 1870-'71-'72-'73 and '74, for the Militia Service, including the Mounted Police, either for payment of men, expenses attending camps, or for clothing, ammunition, drill sheds, or other incidental or ordinary expenses of the Department in Ottawa. [Not printed.]
- No. 95... Postmasters (Instructions):—Return to Address, Instructions issued to the Postmaster in cities, towns and villages, by the Postmaster General, under authority of section 42 of the Act 31 Vict., cap. 10, with reference to dutiable goods brought into the Dominion through the post office. [Nat printed.]

SUPPLEMENT

(No. 3)

TO THE SEVENTH ANNUAL REPORT OF THE DEPARTMENT OF MARINE AND FISHERIES,

Being for the Fiscal Year ended 30th June, 1874.

REPORTS

OF THE

MONTREAL, TORONTO AND PICTOU HARBOUR COMMISSIONERS, THE QUEBEC TRINITY HOUSE, THE PILOTAGE AUTHORITIES,

THE

SHIPPING AND HARBOUR MASTERS,

AND ON THE

HARBOUR AND RIVER POLICE

OF THE

DOMINION OF CANADA,

ON THE

31st day of December, 1874



OTTAWA:
PRINTED BY I. B. TAYLOR, 29, 31 and 33 RIDEAU STREET,
1875.

DEPARTMENT OF MARINE AND FISHERIES,

OTTAWA, 1st January, 1875.

Sir,—I have the honour to submit herewith Supplement No. 3 to the Seventh Annual Report of the Department of the Marine and Fisheries, being for the Fiscal Year ended 30th June, 1874; containing the Reports of the Montreal, Toronto and Pictou Harbour Commissioners, the Quebec Trinity House, the Pilotage Authorities, the Shipping and Harbour Masters, and on the Harbour Police of Montreal and Quebec.

I have the honour to be, Sir,

Your most obedient servant,

WM. SMITH.

Deputy Minister of Marine and Fisheries.

THE HON. ALBERT J. SMITH, M.P.,

Winister of Marine and Fisheries.

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APPENDIX No. 1.

REPORT ON THE OPERATIONS OF THE HARBOUR COMMISSIONERS OF TORONTO FOR THE YEAR 1874.

COMMISSIONERS OF THE HARBOUR OF TORONTO.

WM. SMITH, Esq.,

TORONTO, January 30th, 1874.

Deputy of Minister of Marine,

Ottawa.

SIR.—I herewith comply with your request of the 31st ult., and enclose you copies of the operations of the Toronto Harbour Trust, for the year 1874, hoping it contains the necessary information for your Department.

I am, Sir, your obedient servant,

J. CÁRR, Harbour Master.

To the Board of Harbour Commissioners, Toronto.

Gentlemen,—I would most respectfully present for your information the following Report of the operations of the Harbour Trust for the past season of 1874, which, I regret to say, was one of marked depression in shipping business. From the opening of the navigation on the 7th of March, to the final closing of the same on the 12th December, the receipts for Harbour Dues were \$10,144.15, being a decrease from 1873 of \$2,548.44 and increase over 1872 of \$1,124.14.

The falling off in Harbour receipts this year was altogether in the supply of coal. In 1873 the quality of coal imported was 188,735 tons; this year the total amount was 128,334 tons; showing a falling off in 1874 of 60,401 tons, causing a deduction in Harbour receipts, on coal alone, amounting to \$3,019.15.

The Grand Trunk Railway Company's importation by water was 27,319 tons less than previous year. The Coal Merchants' importations were also 33,065 tons less than last year; this falling off also considerably affected the shipping trade, as the 60,401 tons of coal would have, on the average cargoes, fraighted upwards of 200 vessels.

There were large quantities of merchandize, wood, hay, &c., brought into the city by rail. The harbour receipts on other importations by water have generally increased over last years.

The following is a statement of vessels frequenting the harbour during the season of 1874:

Sailing vessels, loaded	1,534
" " unloaded	15 0
Steamboats, loaded	
" unloaded	15
Propellers, loaded	196
" unloaded	68

Showing a falling off, in 1874, of 629 yessels.

The usual number of tugs were employed during the season in towing vessels, rafts, &c. It will be seen from the above statement there was a large falling off in vessels trading with our Harbour from previous year. Doubtless this may be attributed to the dullness in shipping business and low freights. I have reason to believe that this stagnation was not felt alone here, but also in all other ports on both sides of our extensive inland navigation.

The number of vessels at present wintering in our Harbour is 46, including steam-

loats, giving a total amount of 11,000 tons. There are also four steam dredges.

The expenditure in dredging operations during the year was as follows, viz. : Messrs. Hamilton & Pearce's contract for dredging channel Queen's Wharf, was again commenced on the 5th of June, and continued up to the 28th of October, when the contract was closed by final certificate of Mr. Tully. The total amount expended in dredging during the year was \$12,949.37, including drawback from 1873 of \$80.36, Engineer's fees, and Check Clerk.

The Channel proper is now upwards of 300 feet wide, and when cross dredged, to clear the bottom, will doubtles give much satisfaction to the Commissioners and also to

mariners frequenting our Harbour.

Queen's Wharf I remises .- This pier, the property of the Harbour Trust, having become very much out of repair from the immense traffic carried on there for the past two or three years, the Board at its last meeting instructed Mr. Tully, in conjunction with Mr. Wragge, Engineer to the Lessees, the Toronto, Grey and Bruce Railway Company, to make an inspection and report on the state of the wharf, and the cost of putting the same in good repair.

I would respectfully urge on the Board the necessity of having those repairs commenced at as early a date as possible, there being comparatively little business going on over this wharf in the winter season. It might be well, at the same time, to again request the Corporation to repair their portion of roadway leading to this wharf, and the Toronto, Grey and Bruce and Northern Railroad premises, from which there is a large

amount of taxes collected annually.

Mr. Tully, Engineer to the Trust, will, I have no doubt, furnish all necessary infor-

mation in connection with the works under his supervision.

The Rolling Mills, Don Channel, have not required any expenditure thereon this year; although considerable shipping business has been carried on there, everything went on satisfactorily. The Eastern Gap Channel continued favourable during the greater part of the season, admitting of steamboats and other vessels passing in and out up to the beginning of October, the water averaging from 7ft. 2in. up to 8ft. 3in.

The water in the Harbour kept unusually high until towards the closing of the navigation, when it began to fall rapidly, being at times down so low as zero. I might here remark that it is intended, on the opening of the navigation, to place out in the Channels a larger description of buoys, so as to make them observable at a greater distance.

Hood r. The Harbour (ommissioners.—This case, in which the plaintiff was non-suited, the Judges having granted a new trial, came on for argument before the Court of Error

and Appeal on the 15th instant. Judgment reserved.

Mr. Charles Robertson (under the direction of Professor Kingston) has completed the storm signal on the Island, near the Lighthouse, for the Dominion Government. person in charge will take his observations from the Commissioner's storm signal on the

Queen's Wharf, in charge of Captain Kerr.

On the 26th of May last I received a circular from the Department of Public Works. Dominion Government, Ottawa, requesting a statement showing the amount expended on harbour piers and breakwater by local companies, municipal authorities, harbour companics, and other companies or persons, since or before the 1th of July, 1867, on the Harbour of Toronto. On the 27th of June I forwarded, in answer, such information as I was able to obtain in connection with this Harbour, showing that there had been expended by the above mentioned companies, from the year 1853 to 1874, a total sum amounting to \$1,156,879 00. Also, on the 10th of September, I received from the same Department a communication requesting a statement in detail of expenditure on this Harbour in connection with fermer return. Not being in a position to furnish detailed statements of other companies' expenditure, "which was given in bulk sums;" at the same time I furnished a statement in detail, showing the sums expended by the Harbour Commissioners of Toronto on piers, breakwater, dredging, &c., extending from the year 1853 to 1874. amounting to \$207,074 00.

With reference to the Harbour Survey by the Dominion Government, the surveying party, under Mr. Kingsford, C.E., commenced their survey on the 2nd of September, and were withdrawn on the 10th of October. They returned on the 28th of same month to observe the changes which had taken place, the results of which will be shown in the Engineer's Report.

I have much pleasure in stating that, during the difficult operations of laying the Water Works' large iron pipes across the Harbour, there were no complications of any

kind, and only one individual complaint, so far as I am aware of.

In June last I had a convenient boat house built next to Tinning's Wharf for the Harbour Life boat, where she can be speedily launched at any time, should her services be required.

There are many matters detailed in my Monthly Reports to the Board Meetings,

Which are not necessary to repeat in the Annual Statement.

In conclusion, I have much pleasure in again bringing to the notice of the Board the efficient manner in which my two deputies, Captain Kerr and Mr. Helliwell, have assisted me in carrying out the interest of the Trust, showing at all times commendable promptitude in connection with their respective duties.

Hoping the management of the affairs of the Trust for the past year will meet with

the approval of the Board of Harbour Commissioners of Toronto.

All which is respectfully submitted.

JOHN CARR, Harbour Master.

Harbour Master's Office,

December 31st, 1874.

Sir.

Toronto, January 11th, 1875.

I have the honour to report that the dredging at the Western Channel, south of the Queen's Wharf, was continued by the contractor during last year, and completed on the 29th of October last, as previously reported.

Owing to the decreasing level of the water in Lake Ontario, it was found necessary to dredge the blue clay and boulders in the centre portion of the channel, 100 feet in

width, down to the surface of the rock, leaving a depth of 12 feet of water.

The least width of the channel was 328 feet, opposite the western extremity of the wharf, when the dredging was completed; but it is likely that the point of the bar has encroached on the channel during the Autumnal gales. If this is found to be the case, it should be dredged early in the spring.

The present level of the water is about six inches below the datum; and should the low period continue during the ensuing summer, the blue clay and boulders in the remaining portions of the channel should be dredged early this year, so as to ensure 12 feet at the lowest water in all parts of the channel, which will be ample for the trade of the port

for some years.

According to your instructions, I examined the state of repair of the Queen's Wharf, with Mr. Wragge, the Engineer-in-Chief of the Toronto, Grey and Bruce Railway Company, and we agreed that it would be necessary to strip the wharf down to the level of the water, on the outside portions and ties, for a distance of 700 feet, to remove the decayed wood, and replace the same with sound timber and planking eight feet in width, on the south side of the wharf, the cost of the planking to be defrayed by the Railway Company.

As the winter season is the most favourable time to have the wharf repaired, it would be advisable to advertise for tenders, according to plans and specifications now in course of preparation, so that the work may be completed before the opening of navigation this year.

this year. I have the honour to be,

Your obedient servant,

J. G. Worts, Esq.,
Chairman, Harbour Commissioners, Toronto.
5—14

KIVAS TULLY, Engineer.

APPENDIX No. 2.

REPORT ON THE BUOYS IN ST. JOSEPH'S CHANNEL, SAULT STE. MARIE, ONT., FOR THE YEAR 1874.

CUSTOM HOUSE, PORT OF SAULT STE. MARIE, 21st December, 1874.

Sir,—I have the honour to submit to you the following report for the present year respecting the buoys, &c., in the St. Joseph's Channel.

On the 14th of May, I started in a tug with the Custom House boat's crew, for the purpose of laying down the buoys. I completed the work in two and a half days. We

met some miles of heavy ice at the mouth of the river.

During the past season I surveyed and buoyed a dangerous rock about three miles S. E. of Bruce Mines. I also constructed three beacons, viz: two on the "Sister Rocks" at the entrance of the St. Mary's River, and one on a rock in the channel west of Bruce Mines. The two first cannot be injured by the ice, but the last mentioned being erected on a rock with two feet of water on it, may be destroyed; if so, it can be easily replaced in the spring, and at a small expense. I placed range marks at the lower end of the "new channel" through which all the vessels now pass. I have erected a shed for the safe keeping of reserve buoys and anchors.

The Canadian Propellor "Ontario" passed here on the 19th November for Fort William. The Master requested me not to take up the buoys until he returned, which I agreed to. The vessel arrived here on the 2nd inst., when I immediately started in a tug to take up the buoys, and, I regret to say, was not successful in consequence of the ice. We were absent three days, and had great difficulty in getting back to the Sault. As soon as the ice is strong enough, I intend to try to recover as many of them as possible.

There are many excellent harbours on the north shore of Lake Superior unknown to the Masters of our steamers. I would respectfully recommend that beacons be placed at the entrance of these harbours, so as to enable vessels to take advantage of them.

I have the honour to be, Sir,

Your most obedient servant,

JOS. WILSON,

Collector.

W. Smith, Esq., Deputy Minister of Marine and Fisheries, Ottawa.

APPENDIX No. 3.

REPORT OF THE SECRETARY OF THE HARBOUR COMMISSIONERS OF MONTREAL FOR THE CALENDAR YEAR ENDED 31st DEC., 1874.

HARBOUR COMMISSIONERS' OFFICE,
MONTREAL, 8th February, 1875.

SIR,—I have the honour, by direction of the Harbour Commissioners of Montreal, to transmit herewith for the information of the Honourable the Minister of Marine and Fisheries, statements showing the receipts and expenditure of the Commissioners for the Year ended 31st December, 1874.

The receipts from all sources were as follows, viz:-

Inwards.	١ .	. 1	•	
On goods subject to ad valorem wharfage :— \$10,052,787 at ‡ per cent On goods subject to specific wharfage. From Grand Trunk Railway Over, received in fractions	25,131 67,806 3,000 33	80 00	*	cta
OUTWARDS.		1		
Wharfages collected on Sailing Vessels:— Steamers and their cargoes	106,788	10		
From Collectors of Customs, Ontario: For August September October November and December	5,223 4,505 2,495 2,192	26 94	202,760 14,417	
Local Traffic,				
Dues on Goods, inwards. do do outwards. do Barges. do Steamers. Commutation on Steamers Amount received for piling wood do do lumber.	9,468 1,966 19,541 7,921 14,104 3,485 6,776	94 24 76 94 43	63, 265	i 10
Less, wharfage returned	•••••		280,442 421	84 39
Net Revenue			280,021	45
Debentures, sold in January. do February. do March do April do July Interest, accrued on debentures sold do do do do do from City Bank to 30th June do do 31st December.	14,000 105,000 80,000 70,000 19,000 52 1,713 75 6,340 8,728	00 00 00 00 89 14 80 10	288,000 16,910	

		В	rought forward	 \$	cts.	\$ 584,931	cts. 97
From Dominion G	overnment :	•			- 1		
Received of	on account for	dredging plant	in February	 60,000	00 1		
de	o do	do	April	 75,000	00	ì	
de	o do	do	April June	 90,000	00		
de	o do	do	August	65,000	00	: !	
de	ob do	do	November	 49,000		i	
				 		339,000	00
Sundries :—							
Received	for Coal sold			 316	09	!	
			• • • • • • • • • • • • • • • • • • • •			1	
			old planks		80	i	
do	from Harbour	Master, return	ed cartage to yard.		00	í	
do	from F X. Le	febre repayme	nt of Insurance	 159	00	1	
do	for Provisions	sold, remaining	on Tug	 -	5 00	i	
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		00	ŀ	
•		, , , , , , , , , , , , , , , , , , , ,	•••••	 		11,110	89
	Tot	tal receipts	• • • • • • • • • • • • • • • • • • • •			935,042	86

The expenditure of the year was as follows viz :-

	S cts.
Harbour Interest	91,543 56
do Dredging	86.813 53
do Repairs	12,981 50
do Repairs	22,580 40
Debentures paid during the year	51,240 00
Wind Mill Point Wharf	3,392 11
New Scows for Harbour	10,800 00
Longueuil Ferry Wharf	3,830 87
Longueuil Ferry Wharf	5 023 28
Geo. Bowie & Bro., on account contracts	12 604 63
Hochelaga Wharf	9 422 55
McNamee, Gaherty & Frechette, on account contracts	29,574 98
Commissioners Wharf	6,391 86
Richelieu Pier	550 8 5
Buoys and Beacons	8,635 45
New Dredging Plant	417,480 12
Clam-shell dippers. New spoon dredges, Nos. 6 and 7	1,755 03
New spoon dredges, Nos. 6 and 7	40,023 61
New building	4,607 58
Hudon Factory Wharf	12,258 50
Tug "John Pratt"	14,000,00
Victoria Pier	2,698 68
Bowie's Crib, Hochelaga	3,387 99
Bowie's Crib, Hochelaga Harbour Survey.	362 70
New Channel Operations	36,205 75
New Steamer Derrick, No. 3	3,750 00
m 4.3	
Total expenditure	892,215 53
	i -

For operations in the Harbour during the past year, I beg to refer you to the Report of the Harbour Engineer, a copy of which is enclosed.

I also send the Harbour Master's Annual Report, containing much interesting informa ion respecting matters connected with the Port, together with comparative statements of Sea-going and Inland Vessels that have arrived in Port during the past ten years.

By the Report of Captain Short of the "Chain Tug" you will see that this vessel is rendering important service to the trade.

The great power of this Steamer enables her to do the work of three or four Tug Boats, which, before her construction were required to bring up the current from Hochelaga, the larger class of vessels. There is no charge at present made for this service.

The Commissioners have increased their plant during the year, for Harbour purposes,

by the addition of two Dredges, one Screw Tug, and six Scows.

I may mention that a large sum of money has been expended during the year, as you will notice in the Statement of Expenditure, for the improvement of the channel between Montreal and Quebec, as provided by Act 36 Vic., chap. 60, of which a Report has been made to the Department of Public Works for the fiscal year ended 30th June, 1874.

I have the honour to be, Sir,
Your most obedient servant,
H. H. WHITNEY,
Secretary.

REPORT OF THE HARBOUR MASTER.

HARBOUR OFFICE, MONTREAL, 14th January, 1875.

H. H. WHITNEY, Esq.,
Secretary, Harbour Commissioners.

SIR,—I have the honour to submit the following as my annual report for 1874, with accompanying comparative statements showing the dates of the opening and closing of navigation, of the first arrival from sea, and the last departure for sea, classification and tonnage of sea going vessels, and the greatest number in port at one time, also number and tonnage of inland vessels, and the greatest number in port at one time for the past ten years.

The river was frozen over opposite the city, and as far as could be seen on the 17th January; the water was then about $16\frac{1}{2}$ feet above the summer level. On the 19th and 20th January roads were made across the ice, and on the 21st teams crossed from Longueuil and St. Lamberts to the city. From that date the water gradually receded until the 1st May, when it reached its lowest point $21\frac{5}{12}$ feet on the Lock Sill of the Lachine Canal, or $4\frac{5}{12}$ feet above the summer level. It then began to rise again, and on the 9th May was $7\frac{1}{2}$ feet above the summer level. From that date it gradually receded, and on the 1st November reached the lowest point $16\frac{2}{12}$ feet on the Lock Sill of the Lachine Canal, ten inches below summer level, or $19\frac{2}{12}$ feet in the ship channel, and continued so with slight deviation until the close of navigation. The first shove of the ice opposite the city, took place on the 18th April, the water was then 13 feet above the summer level, and daily kept shoving and moving downwards, until the 23rd April, when the harbour was free from ice, and on the 25th a number of small craft arrived in port from Boucherville, where they wintered. The water at this time fell rapidly, leaving large quantities of ice upon the wharves, a large portion of which had to be removed by labourers, and thrown into the river to make room for the business then commencing.

The ice bridge at Cape Rouge, near Quebec, held firm until the 9th May. It then gave way, and the vessels that arrived at Quebec some days previous for Montreal, left on the 10th, and arrived in this port on the morning of the 11th. The steamships "Quebec" and "Samaritan" were the first in port from sea; from that date vessels from sea and els where, began to arrive, and by the end of the month the harbour was well filled with vessels of all descriptions, and business fairly commenced.

The trade to the maritim provinces is rapidly increasing. There are three lines of steamers running regularly between this port and the Gulf ports, viz: Quebec Gulf Port line, Montreal and Acadian line, and the Mitchell line. Each one of these lines expects to be accommodated with a special berth in the harbour, with a shed upon the wharf for their special use. As the inward cargoes of these steamers are altogether coals and are discharged in different parts of the harbour, sometimes at Hochelaga and sometimes at

Wind Mill Point wharf (to accommodate the purchaser of the coal) I think it is unreasonable for them to expect a special berth in the centre and most valuable part of the harbour, when they cannot possibly occupy it half the time, and as they are seldom over twenty hours in receiving en board their outward cargoes. They should receive them where they discharged their inward cargoes, or run their chances like other vessels, and be satisfied with the most convenient place that should happen to be vacant when they require it. At the same time I think their enterprise should be encouraged as much as possible.

The lumber trade to South America has not been so extensive as some previous years. There is no doubt but this trade will increase, and as it requires spacious top wharfage, as the lumber has to be piled and dried before it is considered in a fit state to ship, further extension of wharves at Hochelaga will be required to meet the wants of that branch of business. Messrs. Hall & Co. occupied all the available space for their lumber business at Hochelaga last season, and Messrs. Dyer & Co. were accommodated at the Victoria Pier. This branch of business should altogether be carried on at Hochelaga, so as to relieve the upper part of the harbour as much as possible, and give further accommodation for general cargo vessels.

The number of large steamers from Europe is yearly increasing, and further accommodation for them is necessary. I would again recommend the dredging of the basin along the Military Wharf to the depth of 22 or 24 feet, and as the Military Wharf is in a very dilapidated state, and requires considerable repairs, new cribs could be sunk alongside the old ones, and the wharf completed, at a moderate cost; it would give 1,400 feet additional wharfage in a direct line, and afford excellent accommodation for the largest class of vessels that come to the port.

The Island wharf stands much in need of a thorough repair. In wet weather it is by no means a fit place to land valuable goods upon, on account of the mud and filth that accumulates upon it. I would recommend the paving of that wharf in the same manner as the streets are paved (with stone). It could then be easily kept clean, and in the end be cheaper than planking or macadamizing. The wharf on the inside of King's Basin, and the Wellington Pier are in a very dilapidated state, both standing much in need of a thorough repair.

Considerable dredging was done last fall around the Victoria Pier, and in Metcalf basin, which was much needed. Elgin basin would require to be cleaned out every year, as it is constantly being filled up by the large sewer that empties itself into it from the city. The lower side of Wind Mill Point wharf requires dredging as soon as practicable in the spring. Fifty feet from that wharf there is but 14 feet water, consequently it can only be used for vessels of light draught of water.

The number of Water Police is now altogether inadequate for the wants of the harbour. There are but four men on the beat by day, and four at night, from the canal to Monarque street wharf, a distance of one mile and a half. Double that number would scarcely be sufficient.

The pilots are improving in discipline. There have been fewer complaints this year from captains and agents of vessels, against them, than any previous year since I have been connected with this office.

The Assistant Harbour Master (Capt. Louis St. Louis) appointed last April, has been of great assistance to me, and has discharged the duties of his office in a very satisfactory manner.

Submitting the whole for the consideration of the Harbour Commissioners,

I have the honour to be, Sir,

Your most obedient servant.

A. M. RUDOLF,

Harbour Master.

PORT OF MONTREAL.

COMPARATIVE STATEMENT showing the Classification and Tonnage of Sea-going Vessels, and the greatest number in Port at one time, for the past ten years.

Greatest No. in Port at one time.	42-Oct. 19.	91-June13.	59-Oct. 24.	51~June21.	61-Nov. 4.	62~June 20.	89-0ct. 27.	84-Uct. 30.	84-Aug.28.	76-July 6.
Gross Tonnage.	152,943	205,775	199,053	198,759	259,863	316,846	351,721	398,800	412,479	423,423
Total No. of Vessels.	358	516	464	478	222	089	664	727	202	731
Tonnage.	15,971	17,339	11,478	15,947	17,726	19,428	15,551	14,388	12,583	19,096
	158	. 081	140	187	204	223	180	175	147	169
Tonnage. Sch'ners	4,943	9,981	9,273	7,807	9,243	10,351	7,839	11,504	8,581	10,688
Brigan- tines.	8	69	2	49	49	62	47	8	69	2
Топизде.	8,139	6,415	3,757	4,875	4,735	4,183	6,539	5,221	4,660	3,928
Brigs,	13	27	18	12	18	16	98	8	18	15
Tonnage.	24,789	54,397	39,883	31,871	45,710	75,797	82,363	87,199	15,594	80,677
Barques	28	119	18	. 75	103	157	170	182	164	167
Tonnage. Barques	26,068	42,169	47,463	36,693	64,484	73,175	92,502	62,775	65,823	46,938
Ships.	88	51	28	4	99	78	8	29	72	26
Tonnage. Ship	78,015	75,474	87,199	101,566	117,965	133,912	146,927	217,713	245,237	262,036
Steam-ships.	63	20	106	105	117	144	142	215	242	266
	1865	1866	1867	1868	1869	1870	1871	1872	1873	1874

A. M. Rudolf, Harbour Master.

HARBOUR OFFICE,
MONTREAL, 14th January, 1875.

PORT OF MONTREAL.

COMPARATIVE STATEMENT showing the Number and Tonnage of Inland Vessels, and the greatest number in Port at one time, for the past ten years.

	Number of Vessels.	Tonnage.	Greatest Number in Port at one time.
1865	4,771	626,540	205—September 5th. 240—October 14th. 244—October 31st. 297—June 22nd. 259—November 5th. 255—October 6th. 281—October 6th. 309—October 21st. 296—June 8th. 301—June 1st.
1866	5,083	613,679	
1867	5,248	744,477	
1868	5,822	746,927	
1869	5,866	721,324	
1870	6,345	819,476	
1871	6,878	824,787	
1872	7,150	936,782	
1873	6,751	933,462	
1874	0,835	956,837	

PORT OF MONTREAL.

COMPARATIVE STATEMENT showing the dates of the opening and closing of Navigation, first arrival from Sea, and the last departure for Sea, for the past ten years.

	Opening of Navigation,	Close of Navigation.	First Arrival from Sea.	Last Departure for Sea.
1865 1866 1867 1868 1869 1870 1871 1872 1873	April 10th	December 16th 15th 6th 9th 18th 1st 8th November 26th December 13th	May 3rd	November 24th.

HARBOUR OFFICE, MONTREAL, 14th January, 1875. A. M. Rudolf, Harbour Master.

REPORT OF HARBOUR ENGINEER.

HARBOUR COMMISSIONER'S OFFICE, MONTREAL, 2nd Feb'y, 1875.

H. H. WHITNEY, Esq.,

Secretary, Harbour Commissioners of Montreal.

Sir.—I beg to lay before you, for the information of the Harbour Commissioners, a statement of the works carried out under my superintendence for the past year, under the respective headings of Harbour Repairs, Commissioner's Wharf, Hochelaga Wharf, Longueuil Ferry Wharf, Hudon's Wharf, New Spoon Dredges 6 and 7, Chain Tug Alf. Nish, Buoys and Beacons, and Str. Richelieu and Harbour Dredging.

HARBOUR REPAIRS.

On the opening of navigation last year a great quantity of ice was left on the wharves, which occupied a considerable amount of time and money to remove. No damage of any amount was done to any of the old structures with the exception of a portion of the old Military Wharf, which was damaged by the giving way of the foundation on which the wharf is built. There is, therefore, about 200 feet of this wharf in a dilapidated state, and as the bottom on which it lies was originally built in 10 feet depth and which lies now in 35 feet depth of water, and when renewed, of course must be in

that depth.

We had considerable difficulty in securing our broken stone last winter, and this shows the necessity of awarding contracts only to competent men. On the 19th January last I drew the attention of the Board to the necessity of providing our usual stone. The contract was awarded shortly after to one contractor. He immediately asked to have his contract transferred to another, which was granted. This one also failed in carrying out his contract, and, of course, was cancelled. The contract was then awarded to a third one, when he also failed. This brought up to about the opening of navigation when it was impossible to procure any, unless at an enormous expense. I was forced eventually, to borrow from the Corporation, and which, I may remark, has not yet been returned to them.

This year we have given out a short time ago, a contract for this years' supply of

200 toise of "banc rouge" at \$15.40 per toise.

In my reports for the last few years I have always brought under the notice of the Commissioners, the question of the removal of the scrapings and accumulation of rubbish deposited on the wharves. A great portion of this is of course useless for backfilling, and the great distance, even if so available, renders it too expensive. A large portion of the \$9,000 paid in the shape of wages was for the cartage of this material, a distance in some cases, of at least two miles. I have always mentioned that the system should be adopted as that used in New York and other large places, which is that a large scow should be constructed with "wells" similar to our dredge scows, and moored in some central portion of the harbour, casy of access from each end, and when the scow is full, towed out into the stream and there dumped.

On the 28th May last, Dr. Leprohon made application to this trust to place public urinals on the wharves. I objected to them at the time and I am more than ever convinced that however desirable they may be, the lower level is not the place for them. I recommended at the time that they should be placed on the upper level of Commissioners street, where the use of the sewers and water from the city could be available. Some joint action should be taken at once by the Commissioners and the Corporation of the city.

The total cost of the repairs of the harbour for this year has been about \$11,426, of which no less than \$9,000 was for carters, carpenters, and labourers, and the balance for

material.

During the summer I brought before you the question of a portion of the works at Wind Mill Point, which had been left open so as to allow the entrance of the scows of the dredging fleet. Since, however, the Department of Public Works have commenced

a large improvement in the shape of a new entrance to the Lachine Canal, the whole of the scheme for the improvement of the harbour at Wind Mill Point, which was commenced in 1862, and carried out since at great expense, has been completely destroyed by the Department, leaving the Harbour Commissioners only a narrow strip of 75 feet in width, in lieu of 510 feet which had been partially filled at a large expense to this Trust. The gap which we had left in the cribwork for the entry of the scows, was about 90 feet in length of cribwork, and the Commissioners decided this should be closed, and the work done by day work.

The whole of this front is now available for sea-going vessels, and the cost of this up to date has been \$1,742 60 for wages and \$2,064 06 for material, or a total of

\$3,806 66.

At the Victoria Pier, a considerable amount of damage has been going on for some time, by the slipping out of the cribbing caused by the bottom under them being washed away by the strong current. This year it was determined on repairing same, which was done by building on the old work as it sank and raising it up to the proper level. The total cost of this has been \$2,959, of which \$1,249 was for wages, and \$1,709 for material.

Last spring a contract was awarded the Messrs. Bowie for the construction of a small pier at the upper end of the Richelieu Pier, to protect the steamers of the Richelieu Company from damage from vessels running foul of them while attempting to leave the Princes Basin.

A contract was entered into with the Messrs. Bowie on the 25th April last, and they had it constructed at the gap at Wind Mill Point, so as not to incommode the public at Princes Basin. On the 15th July the contractors attempted to place it in position, but from some cause or other they allowed it to be carried away, swinging around into Market Basin, and carrying away the Quebec steamer in its course. The following day she was again placed into position, when, for a second time, she broke adrift, but this time being carried down the current as far as the Hochelaga shoal, where she grounded. On the 29th July I had her hauled off with considerable amount of difficulty, and moored her astern of the lower side of the Hochelaga Wharf. following day I caused the Messrs. Bowie to be formally protested for the non-fulfillment of their contract for said pier. Nothing further was done in this matter until the 7th September, when the contract was cancelled, and the crib which had been carried away was purchased from the Messrs. Bowie for \$2,200. I caused the bottom of the lower end of the Hochelaga Wharf to be dredged to suit the uneven nature of the bottom of aforesaid crib, at which place she was sunk, filled with stone, and raised up to within four feet of the level of the top of the other wharves, and thus forming a smail addition to the scheme of breast wharves in this vicinity.

I would again draw your attention to the fact of the ladies of the numery at Longue Point, and the Richelieu Company at Boucherville, having constructed wharves on the public beach at the respective places, without the permission of the Harbour Commissioners, as being custodians of the property of the public, as representatives of the late Trinity House

COMMISSIONERS' WHARF.

This contract has been proceeded with this season. The contractors, Messrs. Bowie Bros., had last year sunk about 600 feet of cribwork, and now up to the finished levels. This year they have completed sinking the whole of the cribwork according to plans, of 1,124 feet in length, and forming a connection with Monarque Street wharf, forming two basins of about 300 feet in length, sunk in 24 feet depth of water, a portion of which was this summer occupied by sea going vessels, about 500 feet of which has been completed up to the proper levels and planked. There therefore remains only about 600 feet of the top superstructure to make the whole of this wharf available for the use of the public, and form a very valuable addition to the harbour.

The total amount done by Messrs. Bowie on this contract for the year 1873 was \$13,240. This year they have done work to the extent of about \$14,780 24, or a total of about \$28,020. A sum of \$5,700 had been advanced to the above parties for timber which they had purchased at Lachine on account of this contract, and on which I have retained from time to time the sum of \$3,500, leaving a balance of \$2,200 still due by the contractors on account of the said timber at Lachine.

I would also beg to draw the attention of the Commissioners, as I think being the proper time, the question of providing proper ramp in this portion of the harbour from the increased traffic on this portion of it occasioned by the construction of the breast wharves here. The narrowness of the river here makes it impossible to curtail its width, and as a consequence obliges us to keep the wharves as close to the beach as possible, therefore the width of the wharf near the rear of the stubbs attached to Molson's Terrace is not more than about 100 feet, scarcely sufficient for the necessary space for railway tracks and the ordinary traffic of the wharves, consequently it will become necessary for the Commissioners to purchase a portion of the property fronting on this wharf belonging to the Messrs. Molson, and also to come to some arrangement with the Corporation of the city for the lowering of the grade of Water Street making the vicinity of the Quebec Gate Barracks, and run the same grade or level as far as Voltigeur Street, which would increase the width of Water Street to an extent of at at least 30 feet which is much required at present. I would further strongly urge upon the Commissioners the policy of adopting the necessary means to have Water Street, extended through the property of the Molson's as far as Monarque Street, which would obviate the necessity as at present of going up to St. Mary street, and thus have an uninterrupted front along the river the same as the upper portion of the harbour, and as property is increasing rapidly in value in this, as in other portions of the city, it behoves the Commissioners to act promptly in this matter.

HOCHELAGA WHARF.

This wharf has been under contract for the last two seasons, Messrs. McNamee, Gaherty & Frechette being the contractors. During the summer of 1873, these gentlemen completed 971 feet of crib work finished up to the upper levels, for which they received the sum of \$32,986. During the summer of 1874, they have sunk a further 1,100 feet, but built only to the level of within four feet of the top levels, leaving still about 232 feet to sink to complete the whole distance of 2,300 feet. The crib work has been filled with dredged material, and well filled in the rear, so that no damage need be anticipated from the action of the ice or other causes. A great portion of this filling was derived from the cutting for the approach of the Northern Colonization Railway. A good deal of delay was caused to these works by the Messrs. McDonald in not providing us with this material; as far back as the 3rd of July, they were notified that their application to supply us with a certain amount of material had been accepted, yet it was only late in October that they commenced work after they had been formally protested.

On the 30th September, I protested by the orders of the Chairman, Messrs. McNamee,

Gaherty & Frechette, for alleged breach of contract.

On the 6th November, the above gentlemen commenced to construct some crib work on the beach of the Harbour opposite their property here, and which I consider an encroachment on the property of the Harbour Commissioners. I brought the matter officially before you at the time. I was instructed to protest them, which was done and there the matter remains.

LONGUEUIL FERRY WHARF.

This contract has been proceeded with this summer, and the whole of the crib work now sunk. It was proposed, according to the original plans, to continue this breast wharf in 10 feet depth of water, from the old Monareque, or Molson's Wharf, a distance of 1,800 feet. Messrs. McNamee, Gaherty & Frechette, the contractors, constructed of this during 1873, 842 feet, or from Molson's Wharf down to a point opposite the jail. This season they commenced at the lower end of the work, and worked upwards a distance of 588

feet, or all that is intended; the balance of the 400 feet to be left for a basin to receive

square and flat timber for the use of this part of the city.

The contractors received on this contract in 1873, \$16,303.50, and in 1874, \$4,500. This work has been brought up to the level of about three feet from the finished levels, and well filled in rear with back filling, so that not a great deal of work remains to be done next year. As soon, however, as the grading is done, it will be necessary to have this portion of the harbour, including Commissioners and Hochelaga Wharves, covered with road metal to a depth of at least nine inches. It would not require the best of metal, as the traffic would not be very extensive, as being used principally as pilling ground. It would be, therefore, necessary to have this work done as soon as navigation opens, so that we could use our own property as a piling ground, as the large quantity required would prevent it being secured in winter.

HUDONS WHARF.

Last winter, Mr. Victor Hudon, President of the Hudon Cotton Mills, made application to this Trust for a wharf in the vicinity of Hochelaga Bay. Some time before that, however, I had prepared a plan by orders of the Harbour Commissioners of the whole of the harbour, and what I considered necessary for its future improvement. Among other suggestions was the construction of about 6,000 feet of crib work on the shoal at Hochelaga, when Mr. Hudon made application for this. I reported on the 14th March last, that a portion of the proposed wharf would suit the views of Mr. Hudon; the Board agreed to it, and ordered about 300 feet to be constructed; tenders were called for, and the contract was awarded to Messrs. Bonneville & O'Brien for \$10,997. They commenced work soon after and completed same at the close of the season. They were also instructed to construct two small cribs in order to protect this wharf from the shoving of the ice, as we were unable to provide back filling sufficient. The cost of these two cribs was \$1,332. There were further extras to the amount of \$63, and deductions amounting to \$134, forming a total cost of \$12,258.

I may also remark that this work has been filled with stone from bottom to top, and sunk in 24 feet depth of water.

NEW SPOON DREDGES, SIX AND SEVEN.

The contracts for these vessels were awarded as follows:—the hulls to Mr. M. X. Lefebre, and the machinery to Bartley & Co.; the former had also six scows awarded him to attend on these dredges. Mr. Lefebre as usual, had his contract completed by the time specified, but Bartley & Co., delayed us considerably, having steam up for the first time only on the 5th June. The dredges were not able to work before the first of August on account of this delay.

The contract price paid Bartley & Co., was \$8,975 each; Mr. Lefebre's contract price was \$8,233 each, while the scows were \$1,750 each. While the latter received a further sum of \$300, or \$50 for each scow as an extra on account of increasing the thickness of

the outside planking from four to five inches.

We further paid Messrs. Delisle Bros'. & McGill \$1,362.37 for lifting chains; Moisie Iron Company for iron arms, bale, &c., McIntosh for the iron work for the wooden arms, and supertendence, forming a total of \$49,499.66, for the two spoon dredges and six scows to attend on them.

CHAIN TUG "A. G. NISH."

This vessel has been of good service this season, all opposition to it seems to be silenced; no complaint of the slighest character has been submitted to me. The Pilots who at first threw every obstacle in its way, have this year in no case refused the use of its services, so that now having outlived all prejudice, she may be considered a fixed fact.

Last year we found some difficulty from the great number (9) of turns on the drums, which interfered somewhat with its proper working, but this season we reduced the

number to four, which answers the purpose completely. We were somewhat delayed with these changes which took us far into the spring, but as the water was higher, and of course the current somewhat slacker, no greater inconvenience was felt by the public. The first vessel towed up this season was the ship "Pomona," on the 3rd July, and from that to the remainder of the season, she assisted up the current 145 vessels, of which no less than 51 were steamships. The whole of this work was done without the slightest trouble or extra exertion of any kind. The lengthening of the chain to the extent of of another 1,000 feet was of the greatest service. The whole amount of coal consumed was 82 tens, at a cost of \$429.20. Gilbert's account for the alterations in the drums which reduces the amount of turns was \$2,371.37, the balance was for wages. Her total expenses were \$4,117, while she worked 153 working days would leave her cost at \$27 per day, or less than on our smallest tugs, which cost \$32 per day. And finally, as a proof of her efficiency, I would make the following comparison: In 1867 on the midsummer voyage of the ship "Pomona," belonging to the Messrs. Allan, of 1,195 tons, was unable to come up the current, even with the assistance of the "Rocket," "Hero," "John Bull" and "Canada," were finally obliged to abandon her at the foot of the current, where she remained for four days, until the steamship "Nova Scotian" finally brought her up into the Harbour.

This summer the ship "Strathearn," belonging to the same company, of 1,605 tons, drawing 19 feet 8 inches, with the current at the strongest, having on 16.10 on the sill, or two inches below low water, was brought up the current without the slightest diffi-

culty.

The total number of her crew is only six, and I would draw the attention of the Board whereby this small number may be reduced still further by the placing on board this vessel a small steam engine to haul the tow line on board, as you will see from the small number of men on board they have great difficulty in doing so, and sometimes ships have to wait while they are doing so.

BUOYS AND BEACONS AND STEAMER "RICHELIEU."

The superintendence of the Buoys and Beacons, have been since the abolition of the Trinity Honse, transferred to me, but this year the service has been anything but satisfactory to the pilots and the public. The services of the steamer "Richelieu," which was supposed to be devoted to this purpose, were placed at the disposal of the superintendent of the works at Cape Charles, and of course whenever a buoy was displaced I telegraphed the superintendent, but whether the matter was attended to or not it is impossible for me to say. On account of the sudden setting in of winter last year it was impossible to remove the buoys into winter quarters, consequently they remained out all season. This spring of course a considerable number of them were missing, and had to be replaced by purchasing new anchors and chains. The steamer "Richelieu" is supposed to be detailed for the purpose, and should be employed exclusively as such. The attention paid to the buoys is of paramount importance to the trade, as the absence of one may some day occasion more damage to a vessel in a single instance than the cost of the "Richelieu" for a whole season.

This spring I caused cabins to be placed in this vessel in the hold; they are all completed, requiring only painting, which I was unable to do for want of time. This vessel is now in the Lachine Canal, and Mr. Bartley has a contract for the repair of her the contract of the repair of the contract of the contract of the contract of the repair of the contract of the con

engine, which I think will make her efficient for several years.

I would again draw your attention to the necessity of having more iron buoys constructed to mark the channel out properly, and replace the primitive spar buoy. There were four of such constructed last winter, and placed this spring, and found to answer satisfactorily.

No accident to vessels navigating the channel has occurred this season, and only two vessels to my knowledge have grounded, viz.:—S.S. "Manitoban," at Lavaltrie, and the S.S. "Viking," at Cape St. Michel, and as the bottom in both these places is clay, they sustained no damage.

HARBOUR DREDGING.

The dredging in the harbour has been continued as usual, having been increased by the addition of two spoon dredges and one tug. Dredge No. 1 wintered in the Lachine Canal as usual, and her repairs were completed on the opening of navigation. She commenced work on the 9th May in the Military Basin, where she remained the whole of the season, as well as taking off a spot which had accumulated at the end of the Victoria Pier, and on which the ship "Pride of England" had grounded. This accumulation had been made during the course of the winter, as where the ship grounded there was only 10 feet at low water where the tall previous there was 22 feet. The secons belonging to this vessel were completely worn out, and I substituted two of these secons which had been constructed for the use of the lake and river fleet with which she worked up the close of the season. This vessel removed from this basin this season 39,000 cubic yards of sands at a cost of \$12,544, including tender, &c., or a cost of about 32 cents per cubic yard.

I brought under your notice on the 21st December last, the necessity of providing a new set of buckets for this vessel, and other small repairs to the boiler, hull and machinery, and in view of such, I placed her in Cantin's dry dock where she now is. A contract has been awarded to Mr. E. E. Gilbert for the construction of the buckets, but no action has as yet been taken in reference to the scows, which will entail considerable

inconvenience if the spare scows she used last year are required elsewhere.

Dreige No. 2 came out of the Lachine Canal on the 4th of May, and commenced work on the 12th in the Bonsecours Basin, to remove an obstruction which had formed on the upper side of Victoria Pier, the previous winter. She worked up to 22nd May, when she was then towed down to the Hochelaga Shoal to dredge out the foundation for the cribbing for future structures here, as also to provide filling for the various works under contract. She worked here up to the 21st November, when she went into winter quarters. She removed this year a total of 45,000 cubic yards at a cost of \$10,355, or about 23 cents per cubic yard.

In my report before alluded to, I brought before you the necessary repairs this vessel requires for next season, which consists of a new engine frame of wood, and other small

repairs.

Dredge No. 3. This vessel wintered in Sorel, where she had been placed, so as to proceed early to Contreceur to complete the channel there which had been worked at the two previous seasons. She worked up to the 1st July, completing the channel here to six feet in depth by a width of about eight feet; she was then handed over to Captain Armstrong. This vessel has also the barque "Hope" as coal barge, with the steamer "Delisle," as tender as well as stone lifter. I am unable to give the amount of work done by this vessel, but the cost incurred up to the 1st July, when she was handed over, amounts to a total of \$8,695.38, which comprises the spring repairs to the four vessels above mentioned.

Dredge No. 4. Commenced work on the Commissioners' Wharf on the 16th May, in excavating for the bottoms of the cribs for the wharf under construction there, as well as dredging out the basin in front of same, where she worked up to the 30th June, when she was moved up to the upper side of the Richelieu Pier, to level off the bottom on which it was proposed to place the small pier for the protection of the Quebec boats. She worked up to the 9th July, when she was again sent to the Commissioners' Wharf, where she worked up the 11th August when she was removed to displace some obstructions which had accumulated in front of the old Commissioners' Wharf, from deposits from ships ballast, coal, &c., where she worked up to the 4th September. She then returned on that date to Commissioners Basin, where she worked up to the 22nd September, when she was towed up to the Metcalfe Basin, as the harbour was at that time comparatively empty of vessels, where she worked up to the 10th October, when she went down to Hochelaga Shoal, to assist the other vessels in providing material for the wharves under contract, where she worked up to the 23rd November, when she moved into winter quarters in the canal.

This vessel removed during the season 41,750 cubic yards at a cost of \$10,280.69, or

an average of 24 cents per cubic yard.

Dredge No. 5. Commenced work on the 9th May, to excavate for the foundations of the cribs for the Hochelaga Wharf, near the upper end, where she worked up to the 14th August, when she was sent up to the Victoria Pier to remove some obstructions there, where she worked up to the 5th October, when she also was sent down to the Hochslaga Shoal where she worked up to the 23rd November, having removed during the season 43,000 yards at a cost of \$10,322, or an average of 24 cents per yard.

Dredge No. 6. Commenced work on the 1st August near the upper end of the Windmill Point Wharf, where she worked up to the 14th November, when she moved down to the Elgin Basin, to clear out the mouth of the sewer. The total amount removed by this vessel is about 12,000 cubic yards at a cost of \$7,461, or an average of 62 cents per yard.

Dredge No. 7. Commenced work the same time as No. 6 at Windmill Point Wharf. where she worked the whole of the season, lifting during that time 11,150 yards, at a cost of \$7,515, or 67 cents per yard.

Dredges Nos. 8, 9, 10 and 11, were four of the new elevators which were placed in commission to test them after coming out of the contractors hands. They worked,

however, the balance of the season, when they were taken to Sorel to winter.

In my report before alluded to, I drew your attention to the fact that we require three more decked scows for the spoon dredges, and if the work is to be isolated as last year, it is imperatively necessary that these scows be provided, and a fourth tug secured for the harbour.

NEW ELEVATOR DREDGES.

The Harbour Commissioners having decided on further prosecuting the improvement of the channel between Quebec and Montreal to a further depth of live feet and an increased width of 100 feet, it was necessary that means be adopted for the securing of additional fleet. Plans were prepared, as you are aware, and adopted by the Poard, tenders were called for, and the hulls were awarded to the Messis. Samson & Co., of Quebec for the sum of \$95,891 for the 6 hulls. The time specified for their delivery was the 1st of May last. The contractors made all diligence and deserve credit for being so near the time specified. The first two arrived from Quebec on the 22nd May, and the fifth and sixth on the 25th June. These gentlemen had some claims for extra work and also for delays consequent on the machinery not being forwarded on time. Settlement, however, was made with them on the 8th August. On the 9th August one of the new hulls, No. 13, which had been reserved for Messrs. Atkins & Burgess of Chicago, while lying in one of the new basins of the Lachine Canal, was destroyed by fire. The following morning I made arrangements with Mr. Cantin to have her raised and placed in After having examined her I reported her not fit to be repaired. Tenders were immediately called for another hull to replace her, and Messrs. Samson & Co. were the successful competitors, and in the short space of six weeks they had her here. She is now receiving her machinery.

The contractors for the machinery of these vessels were Messrs. Gilbert, Bartley, McDougall, and Messrs. Atkins & Burgess, of Chicago. Steam was got up by Gilbert for the first time on the 23rd June, and Bartley & Co, on the 25th July, or one month

Gilbert made first revolution of buckets on the 1st August.

On the 22nd April Mr. Gilbert made application to make certain changes in the system of breasting, which was necessarily an experiment, and which I reported in favour of, but with certain reservation in the shape of guarantees as to their complete success. A little later Messrs. Bartley made similar application, which I was obliged to report against, as per my report of the 16th May last.

The first of Messrs. Atkins & Burgess machinery arrived only on the 26th July, so that they were a good deal behind the time specified. They were further delayed by the fire before alluded to. They are now engaged in placing the machinery in her, and I

expect her to be finished shortly.

The scows for the above, 15 in number, were awarded to Mr. P. Letendre for the sum of \$2,400 each, and are now in Sorel.

On the 10th June last I reported on the necessity of chartering another tow-boat to attend on the dredges. I was instructed to employ the boats of the Harbour Tow Boat Co., but finding them insufficient I again brought the matter before the Board, wherein I recommended another tug for the harbour, and also the time had arrived to make arrangements for no less than seven tugs for river improvements. On the 24th August the Greene was purchased for use of the harbour, but no action was taken on the other until late in the fall when contracts were given out for three, one of which was a side wheel.

The survey on the ice is proceeding, and will be finished in a few days, and we will be then able to decide on the future position of the channel at Lavaltries, but I consider it my duty to again draw your attention to Cape St. Charles, where a thorough examination should be made, as should have been done before last years' expense was incurred.

I have the honor to be, Sir,

Your most obedient servant, A. G. NISH, Harbour Engineer.

REPORT OF THE CAPTAIN AND CHIEF ENGINEER OF THE CHAIN TUG

Montreal, January 12th 1875.

H. H. WHITNEY, Esq.,

Secretary Harbour Commissioners.

EIR,—I would most respectfully submit my annual report for the year 1874. accompanying schedule will be found to contain a correct account of the vessels towed by the chain tug during the season, their tonnage, draught of water, consignee, the name of the steamers by which they were towed, also the number of trips made when the services of the tug were not required.

The schedule shows that we have towed during the season 145 vessels with a total tonnage of 86.407 tons, being over twice the number of vessels towed last year.

The distribution of towage shows in whose interest the vessels were towed, and the

number towed for each firm.

The report will be found to contain the quantity of coal consumed, and an estimate of the running expenses per day, with some remarks thereon, and also a few general remarks relative to the working of the tug, its utility, etc., together with a few suggestions which I deem necessary to insure the satisfactory working of the tug during the coming season.

SCHEDULE OF TOWAGE.

Date.	Names of Vessel.	Tonnage.	Draught of water.	Consignee.	Name of Tug.
,, 3 ,, 4 ,, 8 ,, 10 ,, 16 ,, 17 ,, 17 ,, 20 ,, 20	Barque Ocean Gem do Prince Waldimar do W. L. J do Ville de Auveise	402 879 1,598 324 463 293 475 532 659 367	19 0 14 0 15 6 16 6 17 0 15 0 15 6 14 6 17 10 17 6 15 0 17 6 15 0 17 6 15 0	H. A. Allan The Master Mitchell & Co. Gianelli & Co. J. G. Sidey D. Shaw Carbray & Routh Bucknall & Co R. C. Adams Munderlock & Co The Master O'Grady & Henbad Gianelli Beling & Lamotte	Banshee. L. Tourville. Georgian. Range. Rhoda. St. Andrew. do Conqueror.

SCHEDULE OF TOWAGE.—Continued.

Date.		Name of Vessel.	Tonnage	Draught of	Consignee.	Name of Tug.	
				water.			
1874			000	ft. in.	70% 35 & Co	Damme	
July		Ship Lake Michigan	880 461	16 6 17 3	Thompson Murray & Co. Gianelli & Co	Angleses	
"	27	Barque Burgino	783	19 9	do	St. Andrew.	
"	27		319		Lord Magor & Munn	Beaver.	
"	27	Schooner Mary Louisa	133		Boyd & Arnton		
71	30	Ship Shandon	759	14 6	'Frothingham & Workman	Powerful.	
1)	30	Steamship Polina	524	16 6	Mitchell & Co	<u>'_</u>	
	31	Barque Conobbis	437	16 6	Carbray & Routh	Kanger.	
August	1	Steamship Trent	1,410	17 0	D. Shaw	T O Compani	
,,		Schooner Clara Yuel	269 496	9 7	The Master	Rancer	
25		Barque Emma Parker	299	12 0	H. Davis		
"		Brigantine M. A. Palmer Barque Asta Gueseppi	482	17 6	Gianelli & Co	Champlain.	
"	6		424	17 0	Anderson & McKenzie Carbray & Routh	do	
"		Brig Parana	293	14 0	Carbray & Routh	St. Andrews.	
33	8	do Pierre Nolasque	166	7 6	Charlebois	Banshee.	
3)		Barque Blarney Brothers	322	14 6	Redpath & Co	do	
"	9	Ship Abeona	979	19 0	H. & A. Allan	Meteor.	
٠,	9.,	Steamship Hadji	559	17 0	P'Grady & Heuback	1	
,,	11.,	do Denouet	1,161	20 0	D Shaw		
**	12		543	14 0	Mitchell & Co	1	
*,		Propellor Columbia		1 11 0	D. Shaw	W F Paren	
**		Spoon Dredge No. 5		17 6	H. & A. Allan.	Meteor	
"		Ship Gleniffer	578	1 16 0		William.	
»,		Steamship James Graves		17 6	Intercolonial Coal Co		
",	15.	do Norma		18 2	J. G. Sidev.		
"	15.	Ship Midas		15 11	R. C. Adams	Flora.	
",	16.	Brig Cornelia.		14 10	To "Order". Anderson & McKenzie.	Contest.	
,,		Barque Beambar	480	1 15 6	Anderson & McKenzie.	Boston,	
,,		Brigantine Sarah Wallace	215	11 6			
>>	16.	. Barque Caledonia	606	18 C	Reford & Dillon	Champion.	
"	17.			15 0		L'clipse.	
"	17.	Ship Glenbuvie	799 786	14 6		. Kocket.	
"	77.	do William Yeo		17 3			
"	20. 20.	Steamship Quartado Neptune	465	17 0		i i	
,,	20.	do Valleta		16 0	D. Shaw.	1	
,,	23.	do Polina		16 0	Mitchell & Co		
39		. Barque Britannia		18 5	J. G. Sidey	. Boston.	
,,	24.	do Eunomia		16 0	Carbray & Routh John Anderson	Royal.	
39	24.	. do Sir Hy Havelock	.[460	13 (John Anderson	· do	
,,	24.			14 5			
•		. Steamship Tiber		17 10			
"	20.	Brigantine G. Wheelwright.	. 229	13 0	1		
,,	20.	Ship Lake Superior do Cairngorm	1,274	19 2		Rocket.	
"	29	Steamship Cerdic	909	19 2			
"	30	do Roma	508	14 3			
,,	31.	do Hadji		17 6	O'Grady & Heuback	. i	
	31.			17 2	Intercolonial Coal Co	اہ	
Sept.	4.	. Ship Medora	. 780	18 9	H. & A. Allan	Mateor.	
"	4.	Barque Winifred	. 309	14 0		. Anglesea.	
"	6.	Steamship Normonton	. 543	16 9		·lo	
**	0.	Ship City of Manchester	. 686	17 0	D Show	. Iranger.	
**	7	Steamship Delta		15 (. rroods.	
,,	7. 8	do Alhambra	. 722 548		George Heuback	Rhode	
",	10	Barque Belfino Polo	379		6 Anderson & McKenzie		
"	10	do Boomerang do Queen of the North.			6 George Stevens	do	
"	ĩĩ	Ship City of Montreal	486	18	0 H. & A. Allan	Rocket	
**	11	Barone Premier	. 485	15	0 1). Shaw	St. Andrew	
"	11	do Lilian Vigna	. 845		3 !D. Shaw	. do	
,,	ŦŢ	Ship Schroeigard	. 722		0 Wm. Freer & Co	Flora.	
31	70	· · do lake St. Clair	1.001	18	2 Thompson, Alurray & (Champion.	
1,	10	Drigantine Toronto	. 410	17	0 R. C. Adams	Hercules,	
		$-2\frac{1}{2}$		19			

SCHEDULE OF TOWAGE.—Continued.

Date.		Name of Vessel.	Tonnage.	Draught of water.	Consignee.	Name of Tug.
187				ft. in.		
Sept.	14	Barque Clansman	382	15 10 17 0	J. M. Bucknall	
,	15	Brigantine ValeroSteamship Valetta	409 517	17 0 17 0	Mitchell & Co	r sweriui.
**		Barque Mary Louisa	715	15 5	W. H. Ross	Anglesea.
"	15	do River Ganges	641	16 6	Reford & Dillon	Conqueror.
**	16	Brigantine Spray Belle	322	14 6	R. C. Adams	L. A. Seneca.e
,,		Steamship James Groves	596 6 59	17 6 17 0	Intercolonial Coal Co, George Heuback	
,,	20 91	do Hadji	551	13 6	W. Ross & Co	Hero.
22	21	Ship Enmerides	1,111	19 0	H. & A. Allan	Rocket.
,66		Steamship Polina	524	16 0	Mitchell & Co	ì
4.	24		508	16 6	D. Shaw	35.4
66 61		Ship Pomona	1,195 501	19 0 16 6	John Hope & Co	Herenles
**	25 26	Barque River Thames Propeller Argyle	286	10 0	John Hope & Co	inercutes.
66		Schooner Maggie McCrae	395	1	ļ <u></u>	Argyle
"	26	Barque Uyupbeau	308		J. R. Bucknall	William.
46	29	Steamer Minerva	541		Lord Magor & Munn	Ì
"	27			16 10 16 10	George Heuback	
Octobe	_ 30	Barque L. T. Stocker	507 364	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	D. Shaw	L. Tourville
Occupe		Ship City of Quebec	707	1 17 0	H. & A. Allan	Meteor.
**	2		1,072	18 5	H. & A. Alian	
44	3	Barque Louis	639	13 7	Beling & Lamothe	
**		Steamship Normanton	543	16 0	Mitchell & Co	
"	5	do Earl of Lonsdale do Valetta	980 507	19 3	J. G. Sidey D.Shaw	Ronger
14	6	Ship Lake Michigan	880	17 6	Thompson Murray & Co.	Albion
44		Barque Nordstyenuan		14 9	J. R. Bucknall	Hero.
44	7			16 11	Baird & Kinnear	Hercules.
44	7			18 9	Munderloch & Co	Eclipse.
**	7			19 0	John Murray	
"	8 8		465 615	12 0 16 4	Carbray & Routh	William.
**	8	Ship Strathearn	1,705	19 8		Rocket.
**	11	Brig Geo. Fred. Van Vinck	283	11 6	Gillespie & Moffat	
66:	11.	Steamship Vanguard	322		Lord Magor & Munn	
44 64	13	do Hadji	659	17 0	George Heuback	1
"	15	Wreck of the Uarleton Steamship Commodore	{ 280 290	15 6 15 6	Lord Magor & Munn	i
**	17		149	11 0	P. C. Adams	
40	18.		213	15 0	Lord Magor & Munn	ļ
**	18	do Venezia	507	16 0	D. Shaw	
**	18	do Alhambra		16 6	George Heuback	a
**	18	Ship Lake Ontario Brig Palaccio Primo	1,060 330	19 0	Thompson, Murray & Co. Beling & Lamoth	
44		Steamer Columba		15 3	V Hudon & Co	\ do
"	20	Barque Euclid	469	14 6	Gillespie & Moffat	Albion.
**	21	do Cotapaxie	487	14 6	W. Freer & Co	Gatineau.
**	23	do Spanker Steamship Polina Schooner Mary Louise.	476	17 3	D. Shaw	Hero.
"	23	Steamship Folins	524	16 3 12 0	Mitchell & Co. Lord Magor & Munn	Tower Victory.
"	20	Schooner Mary Louise Steamship Normanton		16 0	Mitchell & Co	17. Tourville.
"	31	Ship A beona			H. & A. Allan	Meteor.
Nov.	2	Steamship Roma	507	1 16 2	D. Shaw	
	4	do Margaret Stevenson	66	9 6	W. M. Molson	1
"	4	Ship Gleniffer	799	17 6	H. &. A. Allan	
**	4	Barque Hattie M do Emma Muler	596 505	17 0	Beling & Lamothe John Hope & Co	Deaver.
"	5	Steamship Hadji	659	17 0	George Heuback	11610
44	10	do Venezia			D. Shaw	
• 6	18	do Valetta	517	18 6	D. Shaw	
• •	18	do Polina.	524	13 9	Mitchell & Co	10
£6	18	Ship Lake Frie.	938 722	16 5 17 0	Thompson, Murray & Co. George Heuback	Conqueror.
••	τa	Steamship Alhambra	144		GOOIGO TICHOMOR	
		145 Vessels of	86,407	Tons.	1	<u> </u>
			2	<u> </u>		

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RECAPITULATION.

18	74.	1873.	
Steam Ships Towed	a l	17	Increase 34
Ships 2	15		
Barques 4	19		
Brigs 1	123		1
Schooners	4	•	
Total number of Sailing Vessels 9	ю	55	Increase 35
Lake Propellers	2	•	
Wrecks	1		
Dredges	1		
·			
Total number of Vessels Towed 14	15	72	Total Increase 73

The above table shows an increase over last year's towage of over 100 per cent. Had the tug been ready at the opening of navigation we might have added many more tows to our list, as it is, it would appear that we have effected a saving to the trade of about \$14,500, while our running expenses have not exceeded \$13.25 per day.

EXPLANATION.

It will be remembered that previous to the construction of the chain tug, the rates of towage between here and Quebec were so high that sailing vessels were being gradually forced out of the trade, and our merchants were obliged to replace them by steamers in the hope of overcoming the difficulty. But many of those steamers were not powerful enough to stem the current, they were also obliged to seek assistance from a tug company, which had almost entirely monopolized the towing of the sailing vessels.

The towage was charged at the rate of from \$100 to \$120 for each tug employed, and as it frequently took two or three tugs to assist a steamer through the current we certainly will be quite safe in estimating the service of the chain tug at a saving to the

trade of one hundred dollars for each tow.

1074

TABLE SHOWING THE NUMBER OF TRIPS WHEN OUR SERVICES WERE NOT REQUIRED.

1.	014.			
July	10 1	trip to	assist	the Steamship Derwent
	141	,, .	,,	
	251	,,	,,	
Aug.	191	"	9:	
	211	"	,,	
α.	231	,,	,	
Sept.	51	,,	>:	
Oct.	61	"	"	
	61	"	,,	
N	221	"	"	Steamship Polina
4404	171	"	,,	Steamship Vanguard.
	Total 11			

Total.. 11

DISTRIBUTION OF TOWAGE.

Steamships.

For David Shaw. " Mitchell & Co. " J. G. Sidey. " Lord, Magor & Munn. " J. & R. McLea " Intercolonial Coal Co. " W. M. Molson. " George Heubach.	10 5 4 3 2
Sailing Vessels.	
For St. Lawrence Tow Boat Co, H. & A. Allan, Different parties belonging to Quebec Lake propellors	14 12
" Wreck	1
"Spoon Dredge	1
Total number towed	145
COALS CONSUMED DURING THE SEASON.	
1874.	
June 14 10	0 Tons
July 15 4	4 "
28 7	' ','
Aug. 6	2,,
12 4	~ ,,
18 6	. ,,
28 4	- ,,
Sept. 7 3	
12 3	' ')
17 3	"
23 4 Oct. 1: 3	- ,,
	" "
14 4	• ,,
19 4	, ,,
26	. "
	- ,,
16	` "
	, » -
82	Tons, or

about half a ton per day.

RUNNING EXPENSES.

Wages of crew per day	2	50
Total expenses per day	\$13	25

I have given the above simply to shew that instead of the expenses of the tug being in proportion to her strength, which is the greatest of any on the river, it is exactly the reverse.

THE TUG.

We entered upon active service and brought up the first tow on July 3rd, from which time all went on as successfully and pleasantly as could be desired During the whole season there was not the slightest approach to an accident, and instead of their work being a toil, the whole crew looked upon the approach of each vessel with some degree of delight in hope of adding another tow to the list.

She worked to my entire satisfaction, and amply repaid for the slight changes which were made to her last spring. The lengthening of the chain also proved to be an invaluable improvement, without which many of the vessels that were towed through the cur-

rent could not have been taken hold of.

With regard to this I would recommend the addition of yet another thousand feet,

which would enable us to reach all vessels.

The addition of the rudder also proved to be of advantage in the working of the tug. At first it was argued that such an adjunct would have no effect upon the guidance of the boat, owing to the chain lapping her from stem to stern, and whose rigidity would prove a sufficient guidance, but in case of meeting a raft or another vessel we had not the means of sheering even a point to one side or to the other; while with the rudder, I find that although she cannot be steered just to the place where we might want her, yet she answers tolerably well when steaming against the current.

Another very great advantage would be the addition of a steam windlass, with which we could take in the tow rope at any time. As yet we have always been obliged to run up to our mooring post in order to get the rope clear of the turrent. This manœuvre has always been a cause of delay to us, and has often tired the patience of those who happened

to be waiting for our assistance.

With this and some other trifling additions the tug would be in a complete and efficient state. In order that she may be kept in the said efficient state, she requires to be earefully fitted out each season.

TOWING.

In last year's report, I was obliged to dwell at some length upon the placing of the tug (i. e.,) the point from which we towed. This year, I am happy to state, there has been no fault found. Many suggestions have been offered even by men who are supposed to know all about such matters, many of which were very ridiculous and not worth repeating.

The pilots seem to have realized the fact, that science outlives prejudice.

They have to all outward appearance accepted the situation, and do not hesitate to avail themselves of the advantages which the chain tug affords. They continue to complain, and not without grounds, of the shoals which still exist opposite the Monarque Street Wharf. In the minds of many, these shoals formed one of the impediments in the way of the tug's success, although they do not interfere directly with the towing of vessels nor the operations of the tug, yet the pilots fear them.

I think their fear should be respected and the shoals removed, for should an accident happen through their existence the chain tug would in all probability have to bear the blame, notwithstanding that such accidents had occurred long before the chain tug was

spoken of.

RAFTS AS A HINDRANCE.

Last year we experienced a great deal of trouble and delay caused by the large number of rafts which passed down the river. This year, however, we have been more fortunate, and have experienced no trouble nor delay from them worth mentioning. Our good fortune was partially owing to the manner in which the rafts were run (i. e.,) a number of them following each other closely, and then quite a time allowed to elapse before the arrival of the next lot, during which we often succeeded in bringing up a tow.

Our good fortune may, however, be principally ascribed to the small quantity of timber which passed down compared with last year.

The practice of floating rafts down in lots if strictly observed, might give us all the opportunity we would require for towing, let the quantities of timber be great or small.

THE ADVANTAGES OF THE CHAIN TUG.

I cannot allow this opportunity to pass without saying a word to the utility of the chain tug compared with the old system of towing, by which it was hardly possible to bring a ship of more that 1,200 tons through the current even with five or six tugs, during low water. This was a very serious difficulty, especially when considered in connection with the proposed deepening of the channel, the consequent increase of trade, and increased size of vessels which improvements would naturally draw to this port. The tug was built to overcome this difficulty, and her capability has not been questioned by our merchants, on the contrary they appear to look upon her with favour, yet with that suspicion which plainly says, "Its all very well, but we would rather be sure before we would build larger ships."

Last season we had an opportunity of testing this question practically, by the towing of the ship "Strathearn," a 1,700 ton ship (drawing 19 feet 8 inches) at the time when the water in the river was at about its lowest level. There were no preparations nor gathering of tow boats like on former occasions for vessels of not more than two thirds the tonnege, but the "Rocket" brought the "Strathearn" within our reach, and with that assistance we brought her through the current with the greatest ease, clearly showing that the chain tug may be relied upon, and that she is capable of towing much larger

vessels than any with which she has yet had to deal.

All of which is respectfully submitted

By your most obedient servant,

W. H. SHORT, Captain and Chief Engineer.

REPORT ON THE DECAYED PILOT FUND.

HARBOUR COMMISSIONERS OFFICE,
MONTREAL, 28th January, 1875.

SIR,—I have the honour to enclose for the information of the Honourable the Minister of Marine and Fisheries, statement of receipts and expenditure of the "Decayed Pilot Fund" for the year ended 31st December, 1874.

In consequence of the Government at the last Session of Parliament having placed in the Estimates a sum sufficient to make good the amount lost by the embezzlement of the late treasurer, this fund is now in a better condition than it has ever been at any previous period, as you will observe by comparing the statement now enclosed with the one I had the honour of transmitting last year.

The amount received from Government, together with other securities falling due during the past year, have been invested in Harbour Bonds, bearing interest at 6½ per cent per annum.

The improved state of this fund has enabled the Harbour Commissioners to deal more literally with those entitled to receive pensions from it.

The minimum allowance to widows and infirm pilots, has been fixed at sixty dollars

per annum, and extreme cases are to be specially dealt with.

I have the honour to be, Sir,

Your most obedient servant,

H. H. WHITNEY, Treasurer.

W. SMITH, Esq., Deputy of Minister of Marine and Fisheries, Ottawa. Cr.

H. H. WHITNEY, Treasurer in account with Decayed Pilot Fund

Dubord 3 months' pension to let Feb	do			: :	::												15		•					•	3.5			10 761 9K
ths' pension to 1st do do	333			• •	•	: :	•			Į.	M. C	•	:	pril. (date	Mov.		:		: :					to 1st May				
ths' p						-8- -8		9. 6		٠			op G	ion to 5th	noncion to let May	op		ခွင့်						ths pension	8 -8	ક	ફફ	
. 3 mont	do do frean do	ę.		_	do illie do	llie							iere do			n, o monula do		ф 						L. D. Boullie, 3 months pension to 1st May				
	Abelle Z. Rondrean			Belcour	Belisle N. Bouillie	I. D. I	Mathien	Trottier	Bouez	Mathon	A belle Z. Bondreau	Dubord	Lacoursiere	do Fage Paid Heirs Oliver Raymond	of decease)	vidow Iraineii do Temai		do Belisle						dow L. D. B	Mathon, Dolber	Mathieu,	Beaudry Bonez,	•
By paic	886	do do			දි දි	24	3-8	ટ ન્			S - C	ę ę	op.	do Paid He				۳- -	÷					By paid Wi	-8-E	ę	12 do B	
1874. Feb. 2	٠ عند			op				70.17	do 17	do .							go 9			_				May 8	တ တ မ		ф ф 12	
\$ cts. 1,532 25		88	1,000 00		1 23			8	20 00	1 42	376 19	30 00		25.	1 200 00			Š			1 05		48 60		175	00 09	20 00	
. 6	5 %	Nattawan.	f Bond No.	interest on	yde	Steamer Nipigon	oge for May		r Montreal,	California	ge for June	me ann % e	s, 61 % due	tuo arrivort es	\$300	1 0050	e deficiency	David, late	eal	Aug.	. Imerican	Trump	k, due 30th	ge for Oct.	er Galatin.	000,000	r Montreal,	
Service Servic	oour Sonds ominion Sto	dage S.S.	payment of May	l 6 montes'	on S.S. Cl	Stean	oms, pounds Montreal		Thot Steame	lage on S.S.	oms, pounds	our Dones,	rbour Bond	Honlynn Commissioners norman	No. 27, £20	No. 13, £10	server General, one amount appro-	nt of E. D.	ouse, Montr	do do	ındage Schr	Gills, poundage Sch. G. C. Trump	minion Sto	stor of Customs, poundage for Oct.	Chase, poundage steamer Galatin.	real Colpara	Rouillie, Pilot Steamer Montread	
rward	6 months' interest on £340 Harbour Fonds, 5% 6 months' dividend on £1,620 Dominion Stock, due 31st	Received from Dussureau, poundage S.S. Mattawan	Receiver General payment of Bond No 3.305, due 1st May	Receiver General 6 months interest on above	Naud, poundage on S.S. Clyde	op	Collector of Customs, poundage for May conths' interest. Montreal Corporation	\$2,000 Bond, due 1st May	N. Fourille, 1 1873	Shaw, poundage on S.S. California	ector of Customs, poundage for June 1. 1200 Horbary, Roads, 5% due 5th	o months interest on zoon marbour points, 9 % due ou July	6 months' interest on \$1,000 Harbour Bonds, 61 % due			1	neceived from neceiver General, one amount appro-	embazzlement of E. D. David, late	Registrar of the Trinity House, Montreal	do do	T. A. Burk, poundage Schr. Imerican	ecor or Cust . Gills, pour	6 months' dividend on \$1,620 Dominion Stock, due 30th	ctor of Cust	Chase, rou	vember		
Po Bal nee brought forward	hs' interest c hs' dividend	March eived from Dus	do Kec	do Rece	do Nau		do Coll Received 6 month	000 Bond, d	ed from L. L	Received from D. S.	do Colle	ontas interest o July	interest c	5th July	Harbour Bo	1 t D.	erved from ned priated by Parl	caused by the	gistrar of th	do		do Capt.	is' dividend	Receive i from Collec	Received from Capt.	Received officialisms in bond due 1st No	Received from S. N. 5% on salary, 187	
lo Bal no	6 mont	Ma Receive	o .	·Б	70 70	70	Receive		Keceive 5 %	Receive	P P P P P P P P P P P P P P P P P P P	InT.	6 month	5th	Jo Jo		neceiv	neo	Page Re	p P	ъ-	e e	6 month	Receive	Received	received bond	Received 5% or	
4.	do 5 April 18	M 13 2			do 18		do June 2		ှင် ခ		do 110	25		16					33		25 pt 29	0; 6;		Oct. 31	Nov. 4	H	ود دو	

Ck.	* 88 0001 00 00 4 4 4 4 4 4 4 4 4 4 4 4 4 4	15 00
WHILVEY, Treasurer in account with Decayed Pilot Fund.	1 2 2 2 2 2 2 2 2 2	L. D. Bouillie do
accou	May May 184 A de	=
surer in	23 6 8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
H. H.	Nov. 28'To Received from G. P. Henback, poundage Steamship do 30 Received from Collector of Customs, poundage for Nov. Bec. 31 Interest on Deposit Account with City and District Savings' Bank.	
Ä	187 Nov. 28. 187 E. 187	

26

15 00 15 00 15 00 15 00 15 00 15 00 15 00 15 00 15 00 2,00 77			NEY, Treasurer.	Decayed Pilot bove belonging
do d		\$ cts. 19,000 00 2,000 00 1,620 00 2,030 77 24,650 77	H. H. WHITNEY,	of the Treasurer of the "Decayed of the securities mentioned above belon ANDREW ALLAN, Harbour Commissioner.
do Hamelin do do Trottier do do Belcourt do do Bouez do do Mathon do Paid Widow Dolbeca, 3 months' pension do Mathien do Paid Widow Dolbec, 3 months' pension do Mathien do Balance Mathien do Balance		\$ cts.	(Signed,)	nents of the Tre
9 1118	F FUNDS.			ots and disburseme t December 1874; (Signed,)
do do do	STATEMENT OF FUNDS.			ments of receil ending the 31s correct.
		Montreal Harbor Bonds Montreal Water Works Bonds Dominion Stock. Cash deposited in C. & D. Savings Bank Cash in Treasurer's hands.	mber, 1874.	I hereby certify that I have examined the statements of receipts and disbursements of the Treasurer of the "Decayed Pilot Fund," for the year commencing the 1st January and ending the 31st December 1874; also the securities mentioned above belonging to this find, and the cash on hand, all of which I find correct. (Signed,) ANDREW ALLAN, Harbour Commissioner.
		Monte Monte Cash Cash Cash	Montreal, 31st December,	I hereby certify that I Fund," for the year commeto this fund, and the cash or

HARBOUR COMMISSIONERS' OFFICE, MONTHEAL, 6th February, 1875.

SIR,—I have the honour by desire of the Harbour Commissioners of Montreal, to transmit report for the information of the Honourable the Minister of Marine and Fisheries, in accordance with provisions of the 24th section of the Act respecting Pilotage, the following returns:—

1. Names and Age of each Pilot, &c., licensed or authorized to act by the Harbour Commissioners during the year 1874.

Names.	Age.	Service for which Licensed.
Phillip Belanger	37 37 28 27 28	To Pilot any vessel within the Pilotage District of Montreal.

2. Name of each Pilot, Apprentice, Master or Mate acting under the authority of the Harbour Commissioners of Montreal.

Names.	Age.	Service for which Licensed.
Onezime Naud Zephirin Mayrand P. Marcel Mathieu Frs. Ant. Mayrand Joseph Levile Hector Hamclin Joseph Dussureau Leandre Mayrand Zephirin Bouillie. Placide Gaillardet. David Mathieu Jos. Bernabe de Lafreniere Cyrille Belisle. Adolph Lise. George Raymond Eusebe Toupin. Augustin Naud. Hubert A. Belisle Athanas Dufresne. Jean B. Dorval Louis N. Bouillie Edward Naud Pierre Gagnon George Belisle Onesime Naud Joseph C. Hamelin Joseph C. Hamelin Joseph C. Hamelin Joseph Chandonnet Louis A. Bouillie Prudent Beaudet. Elz-ar Belleisle. Juseph Pleatu	57 57 57 52 45 53 62 47 45 45 48 44 41 43 48 32 47 35 34 41 33 34 34	To Pilot any Vessel within the Pilotage District of Montreal.

2. Name of each Pilot, Apprentice, Master or Mate acting under the authority of the Harbour Commissioners of Montreal.—Continued.

Names.	Age.	Service for which Licensed.
Celestin Brunet Louis Belisle Ulric Groleau Domas Caien Alfred Frenette Alfred St. Armand Phillippe Belanger Victor Gagnon Narcisse Perrault Tréflé Toupin Cleophas Auger	27 34 35 31 37 37 38 27	To Pilot any Vessel within the Pilotage District of Montreal.

Tréflé T pin was deprived of his branch on the 29th October, 1873, for grounding the Steamship "Ganges" at Cape St. Charles. He was reinstated on the 22nd September, 1874.

Damas Caien was suspended for three months from the 22nd September, 1874, for being under the influence of liquor.

Three pilots died, four candidates were licensed, and one reinstated during the year

1874.

There are forty-two pilots acting and four on the pension list.

3rd. Tariff of Pilotage now in force :-

Pilotage of vessels propelled by steam, \$2 50 per foot draught of water.

do in tow of a steamer, \$2 per foot draught of water.

do under sail, \$4 20 per foot, upwards. do \$5 per foot, downwards.

Moving a vessel from one wharf to another in the Harbour of Montreal, \$5.

4th. 5% of the earnings of pilots go to the Decayed Pilot Fund, the remainder is collected by the pilots themselves as soon as the service is performed; it is therefore difficult to give a correct statement of their gross earnings, the following is as near as Possible to the correct sum:—Gross earnings for 1874, about \$36,630.

5th. The receipts during the year, which are derived from the earning of the pilots, being 5% thereof, and interest on investments amounting to \$2,291 92, and the expenditure \$1,260, paid as pensions to old and intirm pilots, and the widows of deceased pilots.

There are twenty-one pensioners on the list at present.

I have the honour to be, Sir,

Your obedient servant,

H. H. WHITNEY,

Secretary.

WM. SMITH, Esq., Deputy Minister of Marine, &c., Ottawa.

APPENDIX No. 4.

REPORT OF THE TRINITY HOUSE OF QUEBEC FOR THE YEAR ENDED 30TH JUNE, 1874.

The Board held sixty-three sittings during the year.

Sundry applications for beach and water lots within the Port of Quebec, referred from the Government of the Province of Quebec, were submitted to the Board and reported upon.

REGISTRATION OF BATTEAUS.

Eighty batteaus were numbered and registered in the Secretary-Treasurer's office up to the 24th March last, when this duty was transferred from the Trinity House to the Collector of Customs by virtue of the Shipping Act, 36 Vic., Chap. 128.

SALVAGE.

Twelve salvage cases were submitted to the arbitration of the Board and awarded

In conformity with the 38th section of the Wreck and Salvage Act of 1873, a tariff for salvage of deals, saw-logs and timber found adrift in the River St. Lawrence, was made and adopted by the Trinity Board, and is now acted upon.

JUDICIAL PROCEEDINGS.

Eight cases, prosecutions against pilots and others for infringement of Pilot and

Marbour regulations, were brought before the Board and adjudged upon.

By the repeal of the 23rd section of the 12 Vic., Cap. 114, by the Pilotage Act of 1873, in operation since the 1st January last, the Harbour Master has lost the right of prosecuting before the Trinity House, pilots for the loss of vessels under their charge, or for being the cause of their sustaining damage. The 71st section of said Act makes such offences a misdemeanour which must be tried by indictment, and renders a pilot guilty of one of said offences liable to suspension or dismissal by the Pilotage authority, but only after a verdict of guilty in the indictment. In consequence of which numerous complaints against pilots lodged with the Harbour Master could not be acted upon by him.

PILOTS.

During the year ten pilots were pensioned, two have died, one was deprived of hisbranch, leaving the number on the active list on the 30th June last, 215, including

4 on sick list,

2 in charge of steamers,

2 do light ships,

1 apprentice branched, and

18 who, having attained the age of 65 years, were licensed for one year, in accordance with the 36th clause of the Pilotage Act of 1873.

There are now forty-six apprentices indentured to the Corporation of Pilots.

HARROUR OFFICE.

Reports were received in this	office of the	following	effects,	picked v	up and	saved in
the Port of Quebec, viz:-		•	·	•	-	

Drift Timber	1,355	pieces.
Boats	21	
Anchors	8	
Chains	7	

Returns of eighty-six casualties in shipping were received, recorded, and copies thereof forwarded to the Department of Marine and Fisheries.

Printed extracts of the By-Laws and Harbour Regulations were put on board all

vessels on their arrival in the harbour.

The following vessels were reported in this office to have dropped anchors and chain n different parts of the river and harbour, viz:-

Below Quebec.

The ship Latona, 2 anchors and 60 fathoms chain. The ship Orient, 2 anchors and 140 fathoms chain.

The barque Champion, 2 anchors and 90 fathoms chain.

In the Harbour.

The ship Fair Wind, 1 anchor and 16 fathoms chain.

The barque Fisher, 1 anchor and 30 fathoms chain. Schooner (name unknown) 1 anchor and 30 fathoms chain.

The ship Cambridge, 1 anchor.

The ship Zetland, 2 anchors and 100 fathoms chain.

SUPERINTENDENT OF PILOTS' OFFICE.

Reports from pilots were received and recorded by the Superintendent of Pilots Viz :__

Of pilotages up the river.		1,397
Of pilotages down the river	***************************************	1,236

In accordance with the 36th Vict., Chap. 10, the Corporation of the Trinity House of Quebec, now consists of a Master and thirteen Wardens, viz:—The Harbour Master of Quebec, the Superintendent of Pilots, and the Chairman of the Board of Directors of the Corporation of Pilots, for and below the Harbour of Quebec, for the time being exofficies, and of four persons elected by the Council of the Quebec Board of Trade, and six wardens appointed by the Governor-General.

The undermentioned now compose the Board :-

Vital Tetu, Esq., Master.

Frs. Gourdeau, Esq., Harbour Master. H. N. Jones, Esq., Warden. D. McGie, Esq., Hon. John Sharples, Joseph Hamel, Esq., Elizeé Braudet, Esq.,

Appointed by the Governor.

R. H. Smyth, Fsq., A. Joseph, Esq., John Roche, Esq.,

Elected by the Board of Trade.

Alex. Fraser, Esq., Hon. Pierre Garneau, "

John Smith, Esq., Superintendent of Pilots, and

Jean Gobeil, Esq., Chairman of the Directors of the Corporation of Pilots. The Master, Harbour Master and Superintendent of Pilots are the only Members of the Board who receive any remuneration for their services.

DECAYED PILOTS' FUND.

Number of pensioners on the fund on the 31st December, 1871:— Decayed Pilots	46 92
Children of Pilots	
-	170
Number of Pilots relieved	9
Total receipts for the fund during the year ended 31st Dec., 1873:—	•
Poundage	
Temporary deposits in Savings' Banks	
Fines	00
\$19,559	49
Payments out of the Fund.	
Pensions \$11,324	66
	79
Investments	
Temporary deposits in Savings' Banks	
Sundry payments 500	54
\$22,753	47
State of the Quebec Decayed Pilots' Fund on the 31st December,	187
Money invested \$56,475	00
	61
Cash on hand, viz.:	
In Savings' Banks \$2,000 00	
In Secretary Treasurer's hands 304 33	
\$2,304	33
\$58,981	73
	16
\$58,573	57

RECEIPTS AND EXPENDITURE OF THE TRINITY HOUSE OF QUEBEC DURING THE YEAR ENDED $30 \mathrm{Th}$ June, 1874.

Receipts.

Amount received from the public chest through the Department of Marine & Fisheries	\$7 ,995	00
Expenditure.	* ' ,	
Salaries Trinity House officers and employees	\$6,725	48
Superannuation tax	132	
Contingencies	595	86
Harbour Office	541	66
	\$7,995	00

A. LEMOINE, Secretary-Treasurer. STATEMENT of Monies received and paid by the Trinity House of Quebec, on account of the Quebec Decayed Pilot Fund during the year 1874.

	Recripts.	\$ ets.	\$ ets.
Percentage	Anthusiana of Dilota	, 1	11 100 60
ercentage or cor	tributions of Pilots		11,100 90
Cemporary depos	ts in Savings Bank	• • • • • • • • • • • • • • • • • • • •	9,433-93 5,409-65
porary dopos	us in Savings Dank		5,405 05
	•	į	25,944 48
	Expenditure.	j.	
ensions	•••••••••••••••••••	1	11 610 50
Relief	***************************************	• • • • • • • • • • • • • • • • • • • •	11,618 78
uvestments		1	616 83 3,975 10
temporary Deno	sifs in Savings Bank l		9,415 02
undry Payment	8		394 81
	į	ŀ	
	Persons relieved out of the Fund.].	26,020 54
F. X Tennointe	D:1.4	1	
	Pilot	•••••••	90 6 3
4d. Demore	66		$\frac{28}{96} \frac{47}{00}$
Wm Ruggell	44		96 00
17. Noel	"		96 00
saac Forbes Plante	4		96 0 0
Y. Fortin			36 73
J. Anotil			28 00
P. Ross	"		28 00 21 9 0
	Pensioners on the Fund. Infirm Pilots.		616 83
Blonin D	111/11111 I 41018.	1	
Boissel C		160 00	
Dion, J B		160 00	
Forbes. J		160 00 160 00	
Pelletier, A	*******	160 00	
Pourget, F		140 00	
D'Amer, J. B		140 00	
Courdon. Ti		120 00	
4anoine Ti T		140 00	
Lapointa T V	***************************************	120 00	
Paradia N		120 00 120 00	
Adam I Ta	***************************************	96 00	
Coucher, A		96 00	
Chambari B	***************************************	96 00	
Charest D	**** **********************************	96 00	
Chance IT	*********	96 00	
Cinqmars, T.	***************************************	96 00	
Cote, F	***************************************	96 00	
Curodeau, F	***************************************	96 00 96 00	
Dick F. X		96 00	
Dion G	•••••	96 00	
4 Olimia o		96 00	
4 Ullimian 3.6		96 00	
		96 00	
		96 00	
		96 00	
Gourdeau, J	***************************************	96 00 1	
		96 00	
Lavoie 1	***************************************	96 00	
Lemieux, L	***************************************	96 00	
Li , , , ,	***********	96 00	
		<u> </u>	
	Carried forward	3,792 00	

STATEMENT of Monies received and paid, &c .- Continued.

Brought forward	\$ cts. 3,792 00	~ \$ cts.
Infirm Pilots.—Continued.		
Menard, F. X.	96 00	
Morin, M	96 00 96 00	
Paquet, P	96 00	
Pelletier, F	96 00	
Pelletier, J	96 00 96 00	
Pouliot P	96 00	
Roussel, A	96 00 96 00	
Roy, A Roy, J. L.	96 00	
Sm th, M	96 00	
St. z Pierre, C.	96 00 96 00	
Va llancourt, E. Véi na, C.	96 00	
Velor M	96 00	
Vėrina, O Rejbes, J	96 00 80 00	
Core R	40 00	
Lapierre, Denis J	40 00	
Widows of Pilots,		5,584 00
· ·	80 00	
Widow Adam, C. J	80 00	
" A-selin I:	80 00	
" Asseim, L (M L) " Baquet, F	80 00 80 00	
Baquet, F	80 00	
"Bouchard, M	80 00	
" Brown, Chs " Caron, F	>0 00 80 00	
Carcon G	80 00 1	
"Chevalier, Ed	80 00 80 00	
" Couillard, F " Describers, J	80 00	
" Dick A	80 00	
" Dick, Ths " Dion, J	80 00 80 00	
" Poiron A	80 00	
"Dumas Christ	, 80 00 1	
" Dumas, J " Dunford, T	80 00 80 00	
" Fournier J	80 00	
" Glynn, D	80 00 80 00	
" Gourdeau, P. " Jrvine, W	80 60	
* Econic C F	80 00	
" Lachance, O " Langelier, F	80 00 80 00	
" Langlois J	80.00	
46 Langlois I.	80 00	
" Langiois, P. Lapointe, F	80 00	
Laroche, J B	80 00	
"Lavoie A (L M)	80 00 80 00	
" Lavoie, A (US)		:
" Lavoie I. M	80 00	
' Levesque, F. ' Marcoux, J.	1 00 00	
4 Al article after H	ן איז עס	
44 hi maiur I	80 00 80 00	
Michaux, A		
Carried forward	3,280 00	5,584 00

STATEMENT of Monies received and paid, &c.-Continued.

	5—31 35	, 202 00	,
	Carried forward	364 00	11,880 00
	Baquet, P., infirm	20 60	
46	Toussaint, P., infirm.	24 00 1	ı
"	Pettigrew, W. (2) Boutin, T., infirm.	24 00	
4c	Pettigrew, W. (2)	50 00	
f:	Gourdeau. J. infirm.	1 30 00 3	
44	D. Charest (Gervais) infirm.	40 00	!
"	=	4 10 00 1	
et our	D. Charest, (David) inhrin.	.1 48 00 1	
Change	our, Abraham (insane)	48 00	
m	•		▼
	Children of Pilots.		6,296 00
	Thivierge, L.	. 40 60	A 000 C-
46	Raimond. A	.1 46 66 1	
66	Plante, G	.: 40 00 1	
44	McNeil T	. 40 00 1	
44	Michaud, P	40 00	
,44	Lapierre, P. Lapointe, P.	. 40 00	
16	Langlois, L (AR)	.1 40 00 1	
44	Fortier, A.	40 00	
44	Coté, M	. 40 60	
**	Caron	. 40 00 [
44	Cavenagh, M		
44	Blanchet, Z.	40 00	
44	Servant, J B	.1 48 00 .1 48 00	
4.6	Rouleau, P		
14	Rioux, M		
"	Morency, G	48 00	
# C	Keable, A	48 00	
**	Fortin, J.		
14	Dandurand, J	48 00	
66	Charsez, Z. Chouinard, C.W.	48 00	
**	Royer, A		
"	Reilly, J		
66 66	Pelletier, M	62 00	
"	Leclerc, F.	64 00	
66	Lachance, Y.P.	64 00	
"	Gauthier, H Lachance, FX.		
61	Desrosiers		
44	Desnoyers, F	64 60	
44 44	Coté, C	64 90	
"	Campbell, J	64 00	
**	Bossinot, F	64.06	
**	Blouin, P	64 00	
**	Amiot, W.	64 60	
"	St. Amand. G		
	Simpson, Jos	00 68	
	Simpson, John	80 00 1	
**	Simpson, F	80 00	
"	Ruellé. J	80 00	
**	Rioux, F.	80 00	
	Pouliot, PaulPlante, J M		
	Pineau, B		
	Pettigrew, D	80 00	
**	Patrine, J. B		
**	Quellet, A	80 00	
Widow	Normand, P	89 00	
	Widows of Pilots.—Continued.	, and the second	
			•
	Brought forward	3,280 00	5,584 00
		a otal	S ets.
-)	. a. a.c. company
-			

STATEMENT of Monies received and paid, &c .- Continued.

Brought forward	\$ cts. 8 64 00	\$ cts. 11,880 00
Children of Pilots.—Continued.	ļ	
Child of Dupuis, F., infirm "Forbes, P., infirm." "Gauthier, H., infirm." "Jahan, J., infirm." "McNeil, N., infirm." "Lavcie, E., infirm." "Pouliot, J., infirm. "Turcotte, M., infirm. "Turcotte, M. (mg) "Garneau, P. (3). "Garneau, P. "Pineau, B. "Raymond, J.	20 00 20 00 20 00 20 00 20 00 20 00 57 60 16 00 16 00 48 00 12 00 10 00	675 60 12,555 60
STATE OF THE FUND.		
Money Invested	• • • • • • • • • • • • • • • • • • • •	54,401 19 104 90
In Savings Bank In Secretary-Treasurer's hand	6,063 02 228 27	6,291 29
		60,797 38
Deduct arrears of pensions due this day	•••••	326 58
i i	-	60,470 80

(E. E.)

TRINITY HOUSE, QUEBEC. 31st December 1874.

A. LEMOINE, Secy.-Treasurer.

Examined and approved,

V. TETU,

Master.

Quebec, January 19th, 1875.

DR.

THE QUEBEC DECAYED PILOTS FUND in Account Current with

1874.	For the following Pensions and Relief paid during the year 1874.	\$ cts.	\$ cts.
	For arrears of Pensions to 31st December, 1873 Amount of Pension List for quarter ending 31st January, 1874 do do do 30th April, 1874 do do do 31st July, 1874 do do do 31st October, 1874	203 25 2,777 05 2,793 44 2,960 20 2,884 84	11,618 78
	Relief during the year 1874		616 83
	For the following sums paid:—		
	To paid A. Coté & Co.'s account for publishing Annual Statement of the Fund in Journal de Quebec, and printing cheque book J. Foote's account for publishing Annual Statement of the Fund in the Quebec Morning Chronicle Secretary Treasurer's yearly allowance for a Clerk to assist in the collection and distribution of the Decayed Pilots Fund from	27 08 21 09	
	lst January to 1st May, at \$440 per annum. \$146 64 and from 1st May to 31st Dec., at \$300. 200 00	346 64	394 81
	J. McNider & Co., for \$900 Dominion Stock @ 6% premium, interest accrued, br.kerage and certificate. La Banque Nationale, special deposits.	975 10	3,975 10
	La Caisse d'Economie, N. D., temporary deposits		9,415 02
	Palance		228 27
			26,248 81

Sworn to as being correct and true, this 11th January, 1875.

(Signed), J. GREAVES CLAPHAM, J.P.

Examined balance on hand, Two hundred and twenty-eight Dollars and twenty-seven Cente.

(Signed),

VITAL TETU,

Master.

A. Le Moine, Secretary-Treasurer of the Trinity House of Quebec.

Cr.

			CK
874.	By balance in the Secretary-Treasurer's hands on the 31st Dec., 1873	\$ cts.	\$ ets 304 33
i	Capital and Interest received from the following during the year $1874:$		
	From the Quebec Road Trustees, 1 year's interest on \$22,800, to 1st July, 1874 Quebec Corporation, 1 year's interest on \$0,000, to 1st July, 1874	1,358 00 630 00	
	1874. Estate P. Boisseau, on account of capital	756 00	
	Interest	2,148 GO	
	Antoine Lapointe, amount of his obligation\$100-00 Interest	1,071 00	
	F. J. Pouliot, balance of his obligation	51 68 50 00	
	Interest	277 65 2,975 00 5,409 65	
	Poundage.		14,843 58
	Amount collected during the year 1874		11,100 90
			26,248 81

(E. E.)
TRINITY HOUSE, QUEBEC,
31st December, 1874.

(Signed),

A. LEMOINE, Secretary-Treasurer.

REPORT ON PILOTAGE.

TRINITY HOUSE, QUEBEC, January 15th, 1874.

Sir,—I have the honour to acknowledge the receipt of your letter of the 9th inst., and in conformity therewith transmit to you the following returns relating to pilotage, as required by the 24th section of the Act 36 Vict. Chap. 54, viz:—

1st. A list of each and every pilot licensed for and below the harbour of Quebec.

2nd. List of pilot apprentices.

3rd. A statement of pilotage dues in force.

4th. Statement of the total amount received for pilotage dues.

5th. Statement of receipts and expenditure of all monies received in respect of Filots. The two last statements are founded upon information given by the Corporation of Filots per their Secretary's letter dated 14th January instant, a translation of which is herewith enclosed.

I have the honour to be, Sir,

Your obedient servant,

A. LEMOINE, Secretary-Treasurer.

WM. SMITH, Esq., Deputy Minister of Marine and Fisheries, Ottawa,

> Corporation of Pilots of Quebec, Quebec, January 14th, 1875.

Sir,—In answer to your letter of the 12th inst., requesting to be furnished with certain returns relating to Pilotage, as required by the 4th and 5th sub-sections of 24th section of the Pilotage Act, 36 Vic., Chap. 54, I beg to transmit the following statement, viz:—

Total...... \$158,942 15

Total receipts from Pilotage, \$158,942.15; and total expenditure \$30,739.08.

I have the honour to be. Sir.

Your obedient servant,

C. R. MICHAUD,

Secretary.

A. LINDSAY, Esq.

Assistant Secretary-Treasurer, &c., Quebec.

Branch Pilots for the River St. Lawrence for and below the harbour of Quebec, 31st December, 1874.

Names.	Age.	Names.	Age
Edouard Pettigrew	69	F. X. Pepin dit Lachance.	59
oseph Langlois	68	Robert Demers	59
Aléxis Delisle	64	Paul Gautron dit Larochelle	62
Charles Chouinard	73 6 5	Charles Bernier Regis Ménard	60 59
oseph Pepin Antoine Labréqne	67	George Laplante	61
ean Bourget	66	Jean Dufresne	59
oseph Raymond	71	Amable St. Laurent	60
rançois Joseph Pouliot	67 70	Jean Pouliot	60 60
rédéric Bernier	66	François Vézina	59
ean Gobeil (1st)	65	Alexandre Vaillancourt	68
ves Silvestre	65	Hilaire Raymond	61
Aximilien Caron	65	Jean Francois Lamarre	61
Joseph Lavoie	64 64	Hilaire Jovin	58 59
Thomas Couillard Deprés oseph St. Laurent	63	Pierre Peltier	63
ital Chamberland	63	François Thivierge	59
ierre Laprise	63	Joseph Pouliot (1st)	52
aurent Tremblay	64	Marcel LeBel	61
Dominique Girard	60 67	Edouard Demers. Jacques Tremblay	57 60
harles Pouliot	60	Jean Dugas	58
homas Simard	60	Cyprien Raymond	50
ean Bte. Turgeon	62	Damien Boulanger	60
yprien Langlois (1st)	61	William Russell	5
ean Audet dit Lapointe	61 59	Louis Laprise Pierre Pepin Pie	5
douard Antil dit St. Jeaneorge Santerre	63	Charles Dumas	5
aurent Larochelle	62	François Dumas	5
ouis Cotin Dugal	64	Dominique Verrault	5
douard Genest	57	Louis Crépeau	5.
ierre Lapierreenoni Normand	57 59	Thomas Théberge	50 45
nselme Marmen	58	Michel Guerard.	5
lagloire Delisle	58	Henry Noel	50
ean Baptiste Talbot (1st)	57	Jean Coulombe	5
rançois X. Delisle (1st)	56	Thomas Connell	5
oseph Dick rançois Noel	55 64	Alexis Vézina Gilbert Baillargeon	5 5
aul Langlois	59	Jean Giroux	5
arcel Coté	59	Eusèbe Thivierge	5
corge Andet dit Lapointe	54	François P. Couillard	5
auriei Lachanca	55	Nicholas Fortin	5. 5
aie Marticotte rançois Dallaire	54 57	Magloire Mercier	5
aurent (fodhout (1st)	57	Louis O. Leclerc	6
erre Rov.	59	Pierre Gourdeau	5
OVIS Antil	54	Jean Bte. Tremblay	5
azaise Clavet	54 55	Julien Dion	ð.
avid Cinqmarserre Ruelland	55 58	Pierre Lemieux	50 50
upert Dumas	55	Louis Fontaine.	54
omase Babin	57	Abraham Couillard Desprès	59
S. Beauchor dit Morency	57	Pierre Gobeil	26
GUITCA Penin dit Lachance	62	François Gourdreau	53
ierre Caradon	55 52	Jérémie Dufresne	68 60
douard Lehrecona	$\frac{54}{54}$	Antoine Gobeil	4(
	53	Pierro Fontaine	46
	53	Joseph Lavoie	60
	58	Victor Demers	49
arcisse Forgues ouis Thivierge	53 45	Joseph Plante. François X. Delisle (2nd)	44 25
* wrater & 6 * * * * * * * * * * * * * * * * * *	41	HE TREESON A. Demote (400)	4

Branch Pilots for the River St. Lawrence for and below the harbour of Quebec, 31st December, 1874.— Continued.

Names.	Age.	Names.	Age,
Charles Francis Brown	46	Joseph Pepin Lachance	40
Paul Paquet	53	Damien E. Boulanger	31
Joseph Pouliot (2nd)	47	Commiss Torolois 2nd	30
	44	Cyprien Langlois 2nd	29
George Normand	42	Nazaire Curodean	27
David D'Amour	40		28
Joseph Levesque		Charles Normand	29
Charles Vezina	40	Napoléon Rioux	
Ovide Dick	43	Jean Bte. Tremblay	31
Michael Neil Asselin	44	Raymond Baquet dit Lamontagne	29
Numa Lachance	40	François Xavier Lamarre	28
Hannibal Baquet	39	Moise Pouliot	26
Joseph Gravel	45	Paul Gobeil	28
Auguste Couillard Duprés	38	Charles Alain Raymond	26
Eustache Doiron.	41	Victor Vézina	29
Jean Bte. Pouliot	33	Louis Henorius Lachance	36
Jean Gobeil (2nd)	33	L. B. O. Gautron dit Larochelle	28
Joseph Paquet	38	Chas. Hermie alias A. Bernier	29
Louis Edmond Morin	36	Louis Robert Demers	28
Moise Lachance	37	Vital Ephriem Chamberland	34
Joseph S, Brown	40	Joseph G. Dupil	27
Hubert Raymond	35	Charles E. Nollet	26
Achille D'Amour	35	Jean Baptiste Talbot (2nd)	29
Cyrille Lapointe	35	Louis Fortunat Lavoie	29
Joseph Pouliot (3rd)	31	Joseph Fortier	30
Edmond Larochelle	31	Nestor Lachance	29
Amable Fournier	63	Cyrille Audet dit Lapointe	29
Antoine Thomas Couillard	40	Edouard Turgeon	28
Siméon Plante	39	Joseph Lapointe	31
Laurent Godbout (2nd)	31	Léandre Raymond	26
Pierre S. Laprise	31	Pierre Pepin Lachance	25
Adelme Pouliot	35	Théophile Gourdeau	30
Bart. Pepin dit Lachance (2nd)	29	Isiode Noel	24
Jean Evanie Adam	30	George Simar 1	30
Alfred Larochelle	24	Thomas Alfred Antil	24
Théopile Corriveau	27	Théodule Pepin dit Lachance	29
Elzéar Godbout	26	Achille T. Simard	23
George Couillard Després	26	Troumer I. Diminia	
Goorge Comment Dooptes	20	Total number on active list	201

TRINITY HOUSE, QUEBEC, 31st December, 1874.

LIST of Pilot Apprentices made up to 31st December, 1874.

Names.	Date of Indentures.
D. D. d.	
ean Bte. Patoine	30th September, 1868.
arcisse Lavoie	12th November, 1868.
lfred Turgeon	6th November, 1868.
lbert Royer dlélard Santerre	1941 January, 1809.
melio Couillard	194h Tanuary, 1005.
rs. X. Demeule	2nd April 1869
nézime Noel	6th April 1869.
déophile St. Laurent	
apoleon Egillargeon	
erdinand Pelletier	
oseph Bernier	
eorge Dugas	23rd July, 1869.
onoré Lapierre	13th November, 1869.
ugenè Lachance	12th February, 1870.
harles Bouffard Isaac Gordeau	oth March, 1870.
Seph Lachance.	26th September, 1870,
refflé Delisle	30th August, 1870.
uaries Pelletier	
an Bte Couillard	18th October 1870
azaine Heligio	14th Navamber 1870
ugene Lavoie	Ath November 1870
14108 1/20/21019	
ANADOREON KIOUY	IIIth Appil 1871
Gorge E. Duogl	
seph Dion	27th April, 1871.
lexis Véznia narles Clavet	
aul Lachance	23rd April, 1872.
Cading .Louvin	191of More 1879
VIII P. Lavoia	11th Oatobox 1879
and Pagnet	21st March, 1874.
seph Lachance ul Paquet phonse Pouliot	ZJSt March, 1874.
avid Dune	2186 MACCH, 10/4.
ugenè Anctil Léar Normand	21st Morch 1874
zear Normand.	14th October 1874
Tudent Manager	1141 0 4 1 1074
an S. Bernier	20th October, 1874.
soph Paquet	31st October, 1874.
erre Fontaine	31st October, 1874.

Total Number of Apprentices Fifty-one.

TRIVITY HOUSE,

Quebec, 31st December, 1874.

The Pilotage Dues in force 31st December, 1874.

SCHEDULE A.

TABLE I .- Table of Rates of Paotage for and below the Harbour of Quebcc.

		Fo	r each foot of c	For each foot of draught of water.	·ie
Еном	0-t-	From the 1st May to the 10th Nov.	From the 10th Nov. to the 19th Nov.	From the 1st From the 10th From the 19th From the 1st May to the Nov. to the Nov. to the March to 10th Nov.	From the 1s March to the 1st May
Bio Island, or any other place below the anchorage of the Brandy Anchorage or mooring ground in the Pots, off Here Island.	Anchorage or mooring ground in the Basin or Harlbour of Quebec	ie 18s. 0d.	23s. 0d.	28s. 0d.	20s. 6d.
The anchorage ground at the Brandy Pots, off Hare Island, or any place above the said anchorage ground and below St. Roch's Point.	do do	3 of this sum.	g of this sum.	3 of this sum. 3 of this sum. 3 of this sum. 3 of this sum.	g of this sum
St. Roch's Point, or any place above this Point and below the "Pointe-aux-Pins" on Crane Island	do do	3 do	op *	3 do	op §
"Pointe-dux-Pins" on Crane Island, or any place below St. Patrick's Hole.	op op	do do	op **	4 do	4
The anchorage or mooring ground in the Basin or Harbour of Quebyc	Bic Island, or the place where the Pilot shall be discharged in the River below Quebec	ie 15s. 9d.	20s. 9d.	25s. 9d.	18s. 3d.

Pilots taking charge of Vessels at St. Patrick's Hole, or above it, shall be entitled to no more than the sum allowed in Table II, for piloting Vessels from one part of the harbour to another.

TRINITY HOUSE, QUEBEC, 31st December, 1874.

TABLE II.—Table of Rates of Pilotage for the Harbour of Quebec and below.

From	То		
Any Wharf in the Harbour of Quebec between "Pointe-à-Carcy" below, and Brehaut's Wharf above, both inclusive	Any other Wharf with- in the said limits	} s.	d. 8
Any place in the Harbour of Quebec, not being a Wharf within the above mentioned limits	Any other place in the said Harbour not being a Wharf within the said limits	} 23	4

Trinity House, Quebec, 31st December, 1874.

STATEMENT of Pilotage Dues received by the Corporation of Pilots for the year ended 31st December, 1874.

STATEMENT of all menies received and expended by the Corporation of Pilots of Quebec in respect of Pilotage for the year ended 31st December, 1874.

Receipts	\$158,942	15
Expenditure	30,739	08

T_{BINITY} House, Quebec, 31st December, 1874,

APPENDIX No. 5.

REPORT OF THE SECRETARY OF THE HARBOUR COMMISSIONERS OF QUEBEC UP TO 31st DECEMBER, 1874.

HARBOUR COMMISSIONERS' OFFICE, QUEBEC, January 28th, 1875.

SIR,—In compliance with the request made to the Chairman to the Quebec Harbour Commissioners in your letter dated 5th November last, I have the honour to transmit to you, in duplicate, a list of the receipts and expenditure from the 1st May 1874, to the 31st December, 1874, also copies of the assets and liabilities and a statement of the different policies to protect the property against risks by fire.

The Commissioners, acting in virtue of the 36 Vic., Chap. 62, began their operation on the 1st October, 1873, put all the properties in good order, gave a contract for a lifting barge, now building, at a cost of \$18,500 for the hull alone. They are now giving contracts for the boilers, engines, and the fitting out of the barge.

Contemplating large improvements in the harbour, with the assent of the Government, they passed the following series of resolutions on the 4th of August last.

1st. That it is desirable the work of improvement in the harbour of Quebec, as provided for in the amended Act, 36 Victoria, Chap. 62, be commenced and continued without delay.

2nd. That with a view of obtaining the best possible information and advice as to the most feasible, useful, and practical system of improvement, the sum of \$5,000 be appropriated for the best plans, specifications, and estimates of cost, and \$1,000 for the second best plans; such sums to be paid on the award the Commissioners, after the plans have been approved by the Dominion Government and the Quebec Harbour Commissioners.

3rd. That the competition be opened to the public at large; that they be notified by advertisement in the Quebec Chronicle, Journal, Canadien, Mercury, L'Evenement, and Budget; in two Montreal papers, French and English; in two Toronto papers, in the Echo de Levis, in the New York Herall and Boston Advertiser, and the Messrs. Kinnipple & Morris, of No. 3 Westminster Chambers, London, England, be also invited to compete.

4th. That all parties intending to compete shall send in their plans, specifications and estimates of cost to the Secretary of the Commission, on or before the 2nd day of November next.

5th. That the Commissioners shall not be bound to pay any person, nor shall they be in any way liable for any sum for such plans, specifications and estimates, other than

the sums mentioned in Resolution No. 2, to be awarded as a first and second prize, and the said plans, specifications and estimates, for which prizes shall be awarded, shall become the property of the Commissioners.

6th. That in the preparation of the plans, competitors shall have due regard to the Present and future wants of the trade of the port, whereby facilities may be given to both the import and export trade, for the landing, storing, and shipping of cargo, to the shipping trade, whereby increased acommodation may be afforded to ocean and local steamers and to sailing vessels of all sizes. In view of the speedy construction of the North Shore Railway, and the extension of the terminus to deep water at the mouth of the St. Charles River, and the extension of the Levis and Kennebec Railway and the Intercolonial Railway to the River St. Lawrence, at South Quebec; it is also desirable that competitors should prepare their plans in anticipation of the growth of a western trade at Quebec.

7th. That it being desirable that the discharge of ballast in the river should be stopped, competitors will be expected to propose some plan whereby ballast may be utilized in connection with the proposed improvements.

8th. That as the Commissioners are limited by Act of Parliament not to expend at Present more than \$500,000, should comprehensive plans of improvements involving eventually a larger expenditure than the sum above mentioned be submitted, they will receive the consideration of the Commissioners.

Ten competitors have sent in plans and specifications which are now being examined by the Board, and which will be forwarded to Ottawa to be approved according to Resolution No. 2. A general survey of the harbour was made last fall in view of selecting a site for the proposed Graving Dock. Two excursions were made with the same view, the Honourable Premier being present at the first on the 6th July last.

Hoping that you will find the whole correct,

I have the honour to be, Sir,

Your most obedient servant,

J. B. MARTEL,

Secretary-Treasurer.

W. SMITH, Esq.,

Deputy Minister of Marine and Fisheries, Ottawa.

The Quebec Harbour Commissioners.

Revenue, from 30th April, 1873, to 30th April, 1874.	\$	cts
Beach and Deep-Water Lots, annual rent Reynar's Wharf, 12 months' rent Litkinson's do Sast India do Soint à Carcy Wharves, 12 months' rent Wellington do Sonded Warehouse, storage Harbour of Quebec, stones and bricks from old ruins sold Interest on account current with La Banque Nationale Rental of a few Jackscrews Connage Dues Ship Arthur, difference in cost of repairs Revenue, from 1st May to 31st December, 1874.	73 134 17 28,356	00 90 98 36 60 15 69 93 31
Beach and Deep-Water Lots, rent	983 25	00 00 00 00 10 42 80 70
Assets	52,971 75,239	
Beach and Deep-Water Lots Quarter rents, due 30th April Reynar's Wharf Atkinson's Wharf East India do Grain Store La Banque Nationale Point à Carcy Cash Breakwater Wellington Wharves Jackscrews Sinking Fund	47,844 9,330 8,924 48,365 41,856 11,440 45,457 235,204 9,043	00 75 75 85 84 57 16 00 54 96
Liabilities.	739,492	83
Bonds bearing 5 % Interest, held by the Federal Government	723,000	

QUEBEC HARBOUR COMMISSIONERS.

J. B. MARTEL, Secretary Treasurer.

Harbour of Quebec Paid Hor V. J. Lessier for telegrams to and Faid Hon. V. J. Lessier for telegrams to and from Ottawa 15 65	Date.		\$ cta	в.	\$ cts.	\$ cts.
Harbour of Quebec: Paid pay lists Paid Hon. V. J. Lessier for telegrams to and from Ottawa 15 65	1873.	Expenditure Account.				
Paid pay lists	May 3	Repairs at Pointe à Carcy				997 80
Trop	days	Paid pay lists			24 90	
Alexander Chauveau, Esq., paid him on account of deputation of Ottawa		from Ottawa		i		
Fune 28	. [Alexander Chauveau, Esq., paid him on account of deputation to Ottawa			300 00	
do Thos, Flood, 1791 feet White Pine 161 23 23 26 A. B. Sirols, N. P. 26 55 26 5	une 28		1	- F		356 47
Charges paid for Coals		do R. LeMoine, Esq., a certificate do Fay List	 			
Charges paid for Coals		Plankingdo A. B. Sirois, N. P			26 55	
Expense of deputation to Ottawa 300		1	1			226 93
Expense of deputation to Ottawa 300	.	Charges paid for Coals			14 25 15 82	
Color Colo	July 16	expense of debutation to Uttawa	1			30 07 350 00
Co	July 18	l do la Gagne for a survey		!		204 84 5 00
July 25. do McCaghey & Dolbec for Oil 1		do Pay List on 5th		•••	• • • • • • • • • • • • • • • • • • • •	9 50 24 20
August 2. Paid Pay List. do W. Drum for sawing Timber. 29 45 13 50 August 15. do Pay Lists. 26 14 27 55 do do do 27 55 do do do 8 90 do for advertising in the Morning Chronicle do Le Canadien. 16 71 4 00 August 25. do Pay List. 34 64 do J. & W. Reid for Stationery do Pay List. 7 50 do Assessments 1000 00 do Pay Lists. 6 25 do Pay Lists August 30. Ado Pay Lists. 6 25 do Pay Lists August 7. Akkinsons' Wharf repairs, paid T. Flood for Timber 31 27 do Pay List. August 9. Paid Pay List. 18 70 do J. Naleau, for Spikes. do J. Naleau, for Spikes. 30 00 Charges, paid W. H. Jeffery for wood. 49 00 Paid Office expenses. 56	r .	do Budget do 321 loads of Stone at 3 cts		••••		3 00 9 6 3
August 2. Paid Pay List. do W. Drum for sawing Timber. 29 45 do W. Drum for sawing Timber. 13 50 August 15. do Pay Lists. 26 14 do W. Pay List. 26 14 do W. Pay List. 27 55 do W. Pay List. 26 14 do W. Pay List. 27 55 do W. Pay List. 20 71 do W. Pay List. 20 7 fow May List. <	July 25 July 26	do McCaghey & Dolbec for Oil	\	• • • •	• • • • • • • • • • • • • • • • • • • •	1 68 24 80
August 2. Paid Pay List. do W. Drum for sawing Timber. 29 45 do W. Drum for sawing Timber. 13 50 August 15. do Pay Lists. 26 14 do W. Pay List. 26 14 do W. Pay List. 27 55 do W. Pay List. 26 14 do W. Pay List. 27 55 do W. Pay List. 20 71 do W. Pay List. 20 7 fow May List. <		do 159 loads of Stone				4 77 75 00
August 2. Paid Pay List do W. Drum for sawing Timber. 29 45 do W. Drum for sawing Timber. 13 50 August 15. do Pay Lists. 26 14 do Z7 55 do As 90 20 71 do Assessments. 20 71 do Assessments. August 25. do Pay List. 34 64 do Pay List. 34 64 do Pay List. 34 64 do Pay List. August 27. do Pay List. 7 50 do Assessments. 1000 00 do Assessments. August 30. do Pay Lists. 6 25 August 7. Atkinsons' Wharf repairs, paid T. Flood for Timber. 31 27 do do do 17 48 do J. Nadeau, for Spikes. August 20. do do J. Riood, for Timber. 21 94 do J. Nadeau, for Spikes. Charges, paid W. H. Jeffery for wood. 49 00 Paid Office expenses.		Coupons paid Sundries		•••		25,047 50 13 61
August 2 Paid Pay List do W. Drum for sawing Timber 29 45 13 50 August 15 do Pay Lists do	August	Repairs at Pointe à Carcy; paid Berbeau for				31 50
August 15 do Pay Lists	August 2	Paid Pay List			29 45	01 00
do do do do do do for advertising in the Morning Chronicle do Le Canadien 20 71 do Le Canadien 20 20 71 do Le Canadien 20 20 71 do J. & W. Reid for Stationery do Pay List 7 50 do Pay List 7 50 do Assessments 1000 60 do 40 40 625 40 40 40 40 40 40 40 4	August 15	do Pay Lists	.∤ 2€	14	10 00	
do for advertising in the Morning Chronicle 16 71 4 00 20 71 34 64 64 64 65 65 65 65 65				3 90	CO 70	
August 25 do Pay List 34 64 August 27 do Pay List 6 02 do Pay List 7 50 do Assessments 1000 00 do Pay Lists 6 25 August 30 do Pay Lists 6 25 August 7 Atkinsons' Wharf repairs, paid T. Flood for Timber 31 27 Paid Pay List 18 70 do do 17 48 do J. Nadeau, for Timber 21 94 do J. Nadeau, for Spikes 30 00 Charges, paid W. H. Jeffery for wood 49 00 Paid Office expenses 7 83		do for advertising in the Morning Chronicul	16		02 59	
August 27 do J. & W. Reid for Stationery 6 02 do Pay List 7 50 do Assessments 1000 60 do G5 do Pay Lists 1000 60 do G5 do Pay Lists 6 25 do Pay Lists 1,186 do Pay Lists	August 25					
August 30 do Assessments 1000 60 do Pay Lists 6 25 Atkinsons' Wharf repairs, paid T. Flood for Timber 31 27 Paid Pay List 18 70 do do do 17 48 do J. Naleau, for Timber 21 94 do J. Naleau, for Spikes 30 00 Charges, paid W. H. Jeffery for wood 49 00 Paid Office expenses 7 83		do J. & W. Reid for Stationery			6 02	
Atkinsons' Whari repairs, paid T. Flood for Timber	August 20	do Assessments	1		1000 00	
Paid Pay List	-ugust 7	Atkinsons' Whart repairs, paid T. Flood for	7)		21 07	1,180 6
Charges, paid W. H. Jeffery for wood	August 9	Paid Pay List			18 70	
Charges, paid W. H. Jeffery for wood	Suat 20	do T. Flood, for Timberdo J. Nadeau, for Spikes		••••	21 94 30 00	
Paid Office expenses. 7 83 56		Charges, paid W. H. Jeffery for wood			49 00	119 3
		Paid Office expenses		• • • • •	7 83	56 8
Carried forward		Carried forward,	ļ	•••	 	28,773 1

				 ,
		\$ cts.	\$ cts.	\$ cts.
	Brought forward			28,773 15
-	Expenditure Account Continued.			
September 1	Tonnage dues, paid J. W. Dunscomb for Com-			44.0 *
Scptember 4	mission Insurance Account, paid Premiums. Bonded Warehouse No. 7, paid annual Tax Bonded Warehouse, No 7, paid to A. Foster for five cases gin, stolen from warehouse through	•••••		24 81 15 00 40 00
Septemb 6	five cases gin, stolen from warehouse through the windows. Paid Pay List. do D. Laliberté, Smiths' work. do L. Lamontagne, Bonds. do A. Cotè & Co., for advertising. do Subscription to "Journal de Quebec" do For Stationery.	•••••	4 16 1	22 20
September 20 September 27	do Pay Listdo Pay Listdo Pay Listdo Pay Listdo Pay Listdo	******	28 61 5 85	
	Charges, paid sundry signing Bonds Paid office expenses do Bonus to the Secretary and Messenger as voted by the Board on 25th		70 00 19 57 500 00	114 54
October 18 October 25	Paid Pay List do Pay List do Thos. Flood, for 504 feet pine do Pay List do Pay List do Thos. Flood, for 782 feet pine		5 15 4 35 45 36 9 30 9 00 70 38	589 57
October 31	do Pay List		6 10	149 64 21 69 87 75
	mission Charges paid Newton & Glass for Audit of books do Office expenses		40 00 8 77	25 41 48 77
November 8 November 22 November 26	Paid Pay List	1	9.75	
	Charges paid T. H. Grant for travelling expenses Paid Office expenses	!		39 29
	Insurance haid sundry premiums	İ		64 54 151 25
December 1	Delegation to England; paid T. H. Grant, expenses to England Paid Pay List do Le Canadien do 200 printed notices	4 00		212 00
December 18	do A. Coté, &Co., for printing 100 copies of Compilation of Laws, with 12 copies		8 00	
	bounddo Joseph Nadeau, wages		26 25 40 00	80 25
	Carried forward			30,459 86

Date.		\$ cts.	\$ cts.	\$ cts.
	Brought forward			30,459 86
1873.	Expenditure Account - Continued.		1	•
December 18	Insurance, paid sundry premiums			153 50 125 00
	Delegation to England paid cable telegrams to T. H. Grant		37 00 247 42	125 00
{	Paid cheque of T. H. Grant, and Exchange	} }	241 42	284 42
do 27	Office Furniture, paid Mrs. Kane for stove pipes, &c			16 75 6 94
1874. January 3 do 8 do 10 do 17	do J. J. Foote, subscriptiondo Lovell's Gazetteerdo Barbeau, rooferdo Pay Listdo J. Nadeau, wages		2 50 10 00 22 50	
February	do T. H. Grant, travelling expenses do Office expenses do T. H. Grant, travelling expenses Lifting Barge, paid W. Simons and J. Dick			81 00 263 04 9 36 429 69
	for plans and specifications Paid Lafrance and Lemieux for lining and fix ing maps	•		100 00
do 25 do 28	do S. Duffett for boards. do Joseph Nadeau, wages. do C. Giguères for lifting anchors. do "La Gazette Officielle". do Pay List.		11 79 40 00	56 56
	do L. Arel for ice		5 00 7 08	160 79
do 23do 31	do A. Laume, mooring posts do J. J. Foote, for advertising do J. & W. Reid, for stationery do B. Chamberlin, advertising By-law do Pay List do do do Joseph Nadeau, wages		12 10 4 65 8 44 20 00 9 60	12 08
April	do T. H. Grant, travelling expensesdo Office expenses		22 50 7 25 40 00	109 31 411 87 7 10 45 00
May 27	do for 113 loads of stones		3 39	73 14 619 29 496 89 7 97
do 2 do 9 do 16 do 23	expenses Paid Pay List do do do do do do	•	9 25	594 7
5-42	Carried forward			34,524 2

	•			-			
Date.		\$	cts.	8	cts.	\$	cts.
* · · · · · · · · · · · · · · · · · · ·	Brought forward					34,52	4 29
1874.	Expenditure 'AocountContinued.						
day 23 do 30	Paid O. Beaubien & Co., 2,497 feet of planking do O. C. Lafleur for cushions do Pay List	•••••	••••	1	19 78 10 50 12 57 30 00 1		
	bridge					47	7 42
do 6do 12do 13do 14do 15do 16do 17	do J. J. Foote for advertising	•••••	• • • •	3	10 48 25 60 21 10 30 40 37 49		
do 19do 20	do Pay List	· · · · · · · ·	• • • • · ·		28 00 14 65 31 35		
do 27	do do	3	4 00	1	28 10		
	and 200 sheets, imperial		9 00	11	l3 00 i		
	Harbour Dues, amount refunded	•••••					9 00
do 30	The Honorable the Receiver-General, paid him		• • • • •		······		25
ul y	The Honorable the Receiver-General, paid him for interest, &c. Insurance, paid premium. Paid office expenses						5 24 7 50 0 86
do 4	do Pay List	• • • • • •	•••••	3	5 10		
	do Brousseau for 105 feet of timber do T. H. Grant, travelling expenses to and				0 50		
do 6	from Montreal				0 00		
do 13	do O. Beaubien & Co., 2,808 feet of plank- ing				80 89 1 80		
do 18 do 25	do Pay List			3	7 50 5 40		
do 20	do Angers, J. P. for renewal of registration	•••••			2 00		
ugust 1	do Pay Listdo travelling expenses to and from Ottawa,	· • • • • • •	••••		9 25	44	3 19
l	do travelling expenses to and from Ottawa, from 6th to 11th inclusive				6 00 8 33		
do 15	do Pay Listdo travelling expenses to and from Montreal	• • • • • •	•••••	ŧ	2 70		
	with Mr. Morrisdo J. J. Foote for advertising.]	7 50 3 89		
	do Pay List			4	0 55		
do 22	do dodo Thos. Flood for planking		• • • • • • • • • • • • • • • • • • •	51	9 41 5 00		
do 28	do A. Beaume for timberdo Z. E. Crepin for 300 boards	· · · · · · · ·			9 68 6 00		
do 29		 ••••		2 5	3 13 3 60	1 40	
eptember 4	Paid office expenses						1 74) 99 5 00
	Bonded Warehouse No.7, paid Government Tax				•••••		00
	Carried forward					71,44	65

D	ate.		\$ ets.	\$ cts.	\$ ets.
	·	Brought forward			71,448 65
18	374.	Expenditure Account.—Continued.			•
¥	•	Harbour of Quebec :-			
	per 9	Kinipple & Morris' report			34 00
do do	12	Paid Pay List			
do	14	Toronto Mail for advertising		19 50	
do	19	Pay List		71 12	
do	26	for 10½ cords wood Lépine, coal tarring	*****	57 75 24 00	
a. .	20	Pay List		87 30 1,000 00	
do	28	Assessments	****** ****	1,000 00	1,405 84
		Charges, paid office expenses	* . • * * *		22 08
		do do			17 98
		G. S. Vieu, paid to account of salary	**********	*****	10 00 50 00
October	3			154 48	
	G1111	Pay List P. Lepine, coal tarring		40 35	
		F. Barbeau, shingler			
do	10	A. Barbeau, roofer			
	******	P. Lepine, coal tarring	.,,,,,,,,,,,,,	15 00	
	:	Francis Parent, roofer		12 00 18 60	
do	11	Messrs, Andrews, Caron & Co., annual		100 00	
do	40	S, Duffett for deals		24 43	
do	12 15	J. & W. Reid for stationery L'Echo de Levis for advertising		9 10 23 12	
		Budget do Le Canadien do		25 00 23 12	
		Louvand de Québec do		23 08	
		A. Côté & Co., printers, jobs L. Dugal, translation of specification for	*******	52 50	
do	17,	barge		15 00 47 50	
	41,	Lepine, coal tarring		20 00	
do	20	Francis Barbeau, roofer		10 50 44 46	
do	24	L'Evenement do		27 40 40 45	
do		St. Lawrence Tow-Boat Company		75 45	
uo	29	Pay List V. Turcotte for half an office	*****	30 10 50 00	
		B. Leonard for painting	**********	242 50	1,201 64
a.					
Novemb	30. er 4	Insurance, paid premiums	*****	• • • • • • • • • • • •	87 75
do		of Kinipple & Morris' plans of Graving Dock!	***** *****		20 00 100 00
do	21 7	Michael J Bell, paid him to account of salary. Paid Pay List	******	21.80	100 001
		O. Simard, smith work		8 35 229 01	
		P. Begin, diver	**********	25 00	
		P. Tradel, mason		6 60 40 00	
		Carried forward		\$330 76	74,397 94
		5 8		. 4000 10 }	,

Date.		8	cts.	\$ cts.	\$ cts.
		Brought forward			74,397 94
1874,	1	Expenditure Account Continued]	1	
	1	Harbour of Quebec:		1	
ovember	14	Paid Pay List		25 30	
do	20	T. Flood for Planking		203 66	
do	24	Pay List	• • • • • •	25 85	
3.	30	B. Leonard, Glazier		23 62 26 00	
do	30	Charges:		20 00	635 19
		Paid Office expenses			9 34
		Insurance:			• •
		Paid Premiums		166 25	
)ecember	1	Premiums		138 50	
		Charges:			304 7
		Paid R. Roy, reporter		125 00	
		E. Renaud, reporter		125 00	
		L. Patry do Office expenses.		50 00 12 30	
		Lifting Barge:	• • • • • •	12 50	312 3
		Paid F. Martineau & Co., account			4560 0
do	14,	Michael J. Bell:			
		Paid him to account of Salary			50 0
		G. S. View:		1	***
1.		Paid him to account of Salary	• • • • • •	10.00	140 C
do	7	Pay-List	••••	12 20	
		of Harbour		200 00	
		Toronto Mail, advertising			
		Audet & Robitaille for Coal Tar		39 30	
		Le Canadien, advertising		6 00	
		W. Donn, for sawing wood			
		Boston Advertiser	• • •	14 00	
		Subscription to Budget	• • • • • •	6 00	
do	26	Pay List			
u o	20	M. Simons, surveys			1
		L. Arel, for supply of Ice		. 5 00	
do	31	L. Arel, for supply of Ice			643 2
	-	interest and Sinking Fund, on \$723,-			
		000.00 due this day		.]	
]	21,690
		Salaries.			
				0000 00	l
		The Secretary 20 months	• • • • • •	. 2666 66	[
		Messenger, 20 months			3,826
		Carpenter, 20 months	• • • • •	. 000 00	0,020
		1		i	106,569

APPENDIX No. 6.

REPORT OF THE HARBOUR COMMISSIONERS OF PICTOU, NOVA SCOTIA, FOR THE YEAR ENDED 31st DECEMBER, 1874.

Pictou, N.S., 22nd January, 1875.

SIR,—The Commissioners of the Harbour of Pictou beg to transmit the enclosed attested account of their receipts and expenditures for the year 1874.

They have to report that they contemplate expending the balance of money in their hands in building an addition to the public wharf for ballast purposes on the opening of navigation, and in placing certain buoys within the limits of the Harbour.

We have also to submit for the consideration of the Department the necessity of placing five or six buoys at the entrance of the Harbour, outside the limits of the Commissioners.

The Commissioners would request, if practicable, that the steam dredge Canada (now lying here) be ordered to dredge around the sides and end of the wharf before leaving in the spring, as she cannot get to sea for some time after the wharf is clear of ice.

We have the honour to be, Sir, Your most obedient servants,

> R. P. GRANT, WM. G. CRERAR, Commissioners of the Harbour of Pictou.

To the Honorable

The Minister of Marine and Fisheries, Ottawa.

Account of Moneys received ad expended by the Commissioners of the Harbour of Pictou and Public Wharf, for the year ending 31st December, 1874.

1	Мопеув гесеі ved.	& & & & & & & & & & & & & & & & & & &	Money's expended.	ee Cts
56	Cash in Commissioners' hands, 1st January, 1874. Interest received. Cash from Collector of Customs, proceeds of formage dues. Received from former Commissioner of Wharf. Received from Wharfinger.	1,758 81 2,206 19 2,200 00 3,62 24 693 44	Paid for 533 round wharf logs For 674.2 tons square timber for wharf For hardwood plank for wharf James K. Gunn, surveying above and taking delivery. Lron account. Blacksmith's accounts. Dawson, Gordon & Co., hardware account. Superintendent and labourers, building wharf Telegraph to Miramichi for plank 23.113 superficial feet spruce plank for wharf Expended for labour by Wharfinger. Philip Carroll for hablast. Expenses fixing buoy on ballast ground For bushing channel of Middle River. Wharfinger's salary Commissions on \$2,417 16 at 5%. Balance	458 53 221 51 18 80 50 00 235 57 721 84 721 84 0 18 77 235 57 10 0 0 120 85 2,482 66
Dec.	Dec. 31. Balance in Commissioners' hands at this date	5,020 67 2,482 66		5,020 67

R. P. GRANT, WM. G. CRERAR, Commissioners.

Sworn before me at Pictou, this 22nd day of January, 1875. JAMES HISLOP, J.

APPENDIX No. 7.

REPORT OF THE HARBOUR MASTER FOR THE PORT OF HALIFAX NOVA SCOTIA, FOR THE CALENDAR YEAR ENDED 318T DECEMBER 1874.

HARBOUR MASTER'S OFFICE,

Halifax, N.S., December 31st, 1874.

SIR,—I have the honour to submit my Annual Report, being that for the year ending December 31st, 1874.

And I am glad to inform you that little has transpired during the year, in the way

of irregularities, to which I have to call your attention.

The duties of my office are such that it takes all of my time, and as you will see by the receipt and disbursement account hereto annexed, that the nett income of the office for the year 1874, reached only the sum of \$814.40, when the Act contemplates a remuneration of \$1,600.00 per annum. I, therefore, respectfully beg you will give the subject your favourable consideration and devise some plan to make the office more remunerative. If I may be allowed, I would suggest that a small tax, of say \$1.00 per annum, be put On vessels in the coasting and fishing trade, which would enable me to employ an assistant to better carry out the rules and regulations of my office, which are such as you will see by reference thereto, that they require me to board every vessel entering the port within 12 hours after her arrival, and this I cannot do without the assistance before mentioned.

COLLECTION OF FEES.

The present system of the Harbour Master being obliged to personally collect his fee⁸ from the shipping in port, uses up a large portion of his valuable time which should be devoted to other important duties connected with the office, therefore I would respectfully suggest that the fees be collected at the Custom House, or that it should be made compulsory for every vessel coming under the Act entering at the Custom House to produce a receipt from the Harbour Master showing that his fees have been paid.

In concluding this, my second annual report, I beg to request that you will give the different subjects referred to your favourable consideration.

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

> ELIJAH WOOD, Harbour Master.

To the Hon. A. J. Smith, Minister of Marine and Fisheries,

HARBOUR MASTER'S Receipts and Disbursements from January 1st to December 31st, 1874.

Vessels entering under the Act 35, Cap. 41.	Number	Registered Tons.	Fees Collected.
Schooners	292	26,826	\$ ets. 199 00
Brigantines		46,610	239 00
Brigs		1,334	10 00
Barques		32,916	252 00
Shipe	1	6,408	28 00
Steamships		281,668	262 00
Total Receipts			\$990 00
To paid Office rentdo Incidental expenses		\$100 00	175 00
·			8814 00

ELIJAH WOOD.

Sworn before me, this 31st day } of December, 1874. WM. ACKHURST, J. P.

APPENDIX No. 8.

Collections of Fees made by Harbour Masters appointed under the Acts 36 Vic. Chap 9, and 37 Vic. Chap. 34.

PROVINCE OF QUEBEC.

· 	\$ ets.		\$ ots.
Gaspé	35 00	SorelSt. John's	17 00 86 75
		St. John's	86 75

PROVINCE OF NEW BRUNSWICK.

Bathurst Buctouche Campbelltown Campobello Caraquet Chatham Cocagne Dalhousie.	41 00 42 00 15 00	Hillsboro Ledge of St. Stephens Newcastle Quaco Richibucto St. Andrews St. George	9 00 117 00 49 00
--	-------------------------	---	-------------------------

PROVINCE OF NOVA SCOTIA.

Bear River Bridgewater Great Bras d'Or Little Glace Bay Parrsboro Plaster Harbour	2 00 Sidney	35 00 431 00 9 00
---	---------------	-------------------------

PROVINCE OF PRINCE EDWARD ISLAND.

Cascumpec Charlottetown Crapaud Malpeque Bay Montagu Bridge	13 6 0	Murray Harbour	3 00 1 25 6 00
	1, 00		0.7 00

WM. SMITH, Deputy Minister of Marine and Fisheries. 59

APPENDIX No. 9.

List of Harbour Masters, throughout the Dominion, appointed by Order in Council.

Name. Elijah Wood I James McKinnon I Jomes Bent I William McNab Edward Walter Beaty I Joseph Robbins Wyman I Francis Dunlap I Francis Dunlap I I	Halifax, N.S Halifax, N.S Pictou, N.S Wallace, N.S	Not to exceed	Salary.			Date of Appointment.
William McNab	Pugwash, N.S	Not to exceed	6 1 600 : 6			
William McNab	Pugwash, N.S	Not to exceed	0 1 000 - 0			
William McNab	Pugwash, N.S	do	DI ANOTTE	Fees of Of	fice	Oct. 7th, 1872.
William McNab	Pugwash, N.S	ų u	400	do		June 10th, 1873.
Edward Walter Beaty. I Joseph Robbins Wyman. I	Wallace N.S.	j do	100	do		Oct. 22nd, 1873.
Joseph Robbins Wyman.		do	фo	do	• •	do
Francis Dunlan	Parrsboro, N.S	do	ďο	do	• •	do
Francis Dunjan	Bridgewater, N.S	do	do	do	• •	May 6th, 1874.
		do	200	do		do
Donald Fraser I	Plaster Harbour, N.S.	do	ďο	do	• •	do
Henry Mitchell	Little Glace Bay, N.S.	do	do	do	• •	July 23rd, 1874.
Capt. J. S. Wiley	Windsor, N.S	do	400	do		Sept. 22nd, 1874.
William Hall	Deet Harbour, N.S	do do	150	do do		May 14th, 1874.
William F. Hennigar		do do	$\frac{100}{400}$	ao do		Sept. 22nd, 1874
George B. Ingraham Absolom Kelso Christie. I	North Sidney, N.S	do	100	do		April 9th, 1874
Absoluti Keisi Christie.	N. B.	uo	100	uo	• •	July 7th, 1873.
John Balson S	St. Andrews, N.B	do	do	do		do
James Dick	St. George N R	do	do	do	••	do
John Benjamin Beatty.	Campobello N B	do	do	do	• •	do
John Brooks	Cocaone N R	do	do	do		do
John Brooks	Buctouche N B	do	do	do		do
William Johnston	Chatham N R	do	300	do		do
William Johnston	New Castle N R	go	do	do		do
Peter HacheyI	Bathuret N R	do do	200	do	• • •	Dec. 12th, 1874.
John Urquhart Campbell I	Dalhousia N B	do	do	do		July 8th, 1874.
William Mott	Campbellton N R	do	do	do		July 9th, 1873.
Joseph Carson	St. Martine N R	do	100	do		May 14th, 1874.
Nehemiah Bennett I	Hillsboro N B	do	150	do		April 30th, 1874
Gervais Basil Paulin		do	do	do	• • •	do
James Alexander Jardine I		do	200	do	• • •	May 11th, 1874
Samuel Hayward 1		do	100	do		March 26th, 1874
William White	Charlottetown P E.I	do	400	do		June 17th 1874.
Durcan McGougan I	Malpeque P.E.I	do	200	do		June 20th, 1874.
John Bradshaw Howlett. (C	Georgetown, P.E.T., i	do	do	do		June 17th. 1874.
Ronald Campbell	Summerside, P. B. I	do	do	do		do
Ronald Campbell S George Mackenzie 1	New London, P.E.I	do	do	do		do
Wesley Myers	Crapaud, P.E.I	do	do	do		do
Niel McLeod	North Pinette P.E.I.	do	do	do		do
John Furness	Vernon River Bridge,	do	do	do		do
William Miller	Murray Harbour P E I	đo	do	do	i	do
William Millar Meeorge Alley	Cardigan Bridge, P. E. I	do	do	do	• •	Nov. 4th. 1874.
Daniel C. Campbell N	Montagn Bridge, P.ET	do	do	do	• •	June 17th. 1874.
George Wells	Cascumnec P E I	do	do	do	• • •	do
James Ellis	Port Hill P. E.L.	do	do	do	•	l do
Alexander Mc Arthur	Ermont Bay, P.E.I	do	do	do	• •	do
R. H. Russell.	Quebec, P.Q	\$1,200 as Harb	our Mast	er and Ch		
Piama Ballafanilla le	Sorel, P.Q.	River Police	6 300 °t.	Foos of O		1858. Tung 16th 1974.
Pierre Bellefeuille S Romuald Alf. Girardin.	Standa P O	do do	do do	do do	nce	June 10th, 1874.
Joseph Eden		do do	\$ 500	do		June 17th . 1874. Sept. 22nd. 1874.
o osopii nacii	αωρε, Ι. જ	uo	φυνυ	uo		Dept. 44110. 1015

WM. SMITH, Deputy Minister of Marine and Fishexies. 60

APPENDIX No. 10.

STATEMENT of amount of Collections and Expenditure on account of Harbour Improvements, collected at the undermentioned Ports, at which Tonnage Dues have been imposed by Proclamation, for the fiscal year ended 30th June, 1874.

	qualitatistic report lagine	No. of Tons.	\$ cts.	\$ cts.
	OTTENTO	ļ		
House Harbour	QUEBEC.	736	73 60	
Uraana		3,266 168	326 60 1 68	
	******	100	100	417 00

NEW BRUNSWICK.

Richibucto	20,386	2,038 60	2,352 90
Bathurst	3,143	314 30	
	27,699		2,769 90

Expenditure on account of Harbour Improvements, for the fiscal year ended 30th June, 1874.

Miramichi, subsidy to two tug steamers to tow vessels		
in and out river	\$2,000	00
Richibucto, N.B	5,815	75
Subsidy for steam tug in assisting vessels in and out Richibueto Harbour	2,500	
Amherst, Magdalen Islands, for blasting rock and		
clearing channel	4,721	
House Harbour, for dredging	1,005	85
	16,042	63

WM. SMITH, Deputy Minister of Marine and Fisheries. 61

APPENDIX No. 11.

REPORT OF THE PILOTAGE COMMISSIONERS OF ST. JOHN, N. B., FOR YEAR ENDED DECEMBER 31, 1874.

PILOTAGE AUTHORITY, DISTRICT OF ST. JOHN, December 31st, 1874.

SIR,—I am instructed by the Pilotage authority of this port to furnish you with statements of their proceedings to date.

I have the honour to be, Sir,

Your most obedient servant,

J. U. THOMAS, Acting Secretary.

To Hon. Minister of Marine and Fisheries, Ottawa.

> PILOTAGE AUTHORITY, DISTRICT OF ST. JOHN, DOMINION OF CANADA, December 31st, 1874.

RATES OF PILOTAGE CHARGEABLE AT THIS PORT ON ALL VESSELS, BRITISH OR FOREIGN.

Inwards.

1st District, from Partridge Island to Musquash Head, bearing N. W., per foot one dollar.

2nd District, from Musquash Head to Point Lepreaux, N.W., per foot one dollar twenty-five cents.

3rd District, from Point Lepreaux to North Head Grand Manan, N.W., or North

Channel, S.W., per foot one dollar fifty cents.

4th District, from North Head of Grand Manan or North Channel, as aforesaid, to Machias' Seal Island, south, or Brien's Island, south-east, per foot one dollar seventy-five cents.

5th District shall be from the outside limit of the fourth district to a bound ranging with Mount Desert and Cape Sable Seal Island, bearing north-west and south-east, being the outside limits of the Pilotage district, per foot two dollars twenty-five cents.

Outwards.

From the Harbour of the Port of St. John to outside of Patridge Island shall be one dollar per foot.

Down the Bay of Fundy, when required, shall be two dollars per foot over and above the one dollar harbour pilotage outwards.

J. U. THOMAS, Acting Secretary. PILOTAGE AUTHORITY, DISTRICT OF St. John,
Dominion of Canada, December 31st, 1874.

RATES CHAR ABLE ON ALL VESSELS FOR TRANSPORTING FROM ONE WHARF TO ANOTHER AND MOORING THE SAME.

One dollar and fifty cents for vessels not over 100 tons; two dollars for vessels over 100 tons and not exceeding 200 tons; three dollars for vessels over 200 tons and no exceeding 300 tons; four dollars for all vessels over 300 tons and not exceeding 400 tons and twenty-five cents additional for every fifty tons such vessels may measure over 400 tons.

J. U. THOMAS,
Acting Secretary.

LIST of Pilots licensed by the Pilotage Authority, District of St. John, New Brunswick.

Names,	Age.	Remarks.
Ino. Traynor Inomas Traynor Isamuel Rutherford Jeo. P. Mulherrin Jas. Cassely Jeo. P. Mulherrin Jas. Cassely John Spears John Stagban James Reed Roseph Doherty John S. C. Sherrard Wm. Hatfield James Doyle Henry Spears John Thomas John Thomas Patrick Traynor William Quinn Phomas Doody James Murray Lewis Bennett Henry Thomas John Scott Phillip Geo. Doody John Sproul Bichard Scott James Reed, jr John Spears James Millar John Spears James Millar John Spears James Millar James Millar James Millar James Millar James Mollin James McPaitlin James McPaitlin James McPaitlin James McPaitlin James G. Spears James G. Spears James G. Spears	287 334 33 444 58 33 24 25 29 24 39 46 35 46 35 46 35 46 35 41 46 36 46 36 46 36 46 36 46 36 46 36 46 36 46 36 46 36 46 36 46 46 36 46 46 36 46 46 36 46 46 36 46 46 46 46 46 46 46 46 46 46 46 46 46	All licensed for one year, from 10 December, 1874.

J. U. THOMAS, Acting Secretary.

PILOTAGE AUTHORITY, DISTRICT OF ST. JOHN, DOMINION OF CANADA, December 31, 1874.

List of Apprentices serving under the laws and by laws of the Corporation of the City of St. John prior to the Dominion Laws going into effect.

Name,	Master.	Date.	Term.
Jas. Riding	Jos. Doherty	October 19, 1868	6 years.
Wm. Scott	Jno. Scott	May 12, 1869	5 years.
Thos. Jno. Stone	Jas. Doyle	January 13, 1870	5 years.
Alfred Cline	Richard Cline	August 25, 1871	5 years.
Jas. Bennett	Lewis Bennett	February 22, 1872	5 years.
*Saml. Leah Sutton	Jas. Miller	May 18, 1872	5 years.
Martin Spears	Jno. Spears, (3rd)	April 5, 1873,	5 years.
	Jno. C. S. Sherrard	1	!

Charles Bridges, an apprentice, has had his term of service extended for one year.

*J. L. Sutton's indentures cancelled with Jas. Millar and re-apprenticed to Jas. Reed, jr., for 2½ years from December 16, 1874.

J. U. THOMAS, Acting Secretary.

PILOTAGE AUTHORITY, DISTRICT OF ST. JOHN, DOMINION OF CANADA, December 31, 1874.

Returns of all vessels coming under the direction of the Pilotage Authority from the 1st to 31st December, 1874:—

26 Ships and Barques

21 Brigs and Brigantines

21 Schooners.

68—Amount of Pilotage earned, \$1,461 62.

British, 20 Ships

17 Brigs

6 Schooners

48-Amount of Pilotage paid, \$851 00.

Foreign, 6 Ships

4 Brigs

15 Schooners

25—Amount of pilotage paid, \$610 64.

J. U. THOMAS, Acting Secretary. PILOTAGE AUTHORITY, DISTRICT OF St. John,
DOMINION OF CANADA, December 31, 1874.

RECEIPTS AND EXPENDITURE TO DATE.

License fee of 45 Pilots, at \$5	50 36	60 5 1	#011	~ ~
Paid for chart, &c., C. W. Weldon's opinion J. & A. McMillan, printing	$\begin{array}{c} 25 \\ 4 \end{array}$	20 00 75	\$311	91
Chubb & Co., books and printing. Rent, fuel, gas, 8 months. Examining fees.	105 50 10	00	107	0.5
Balance on hand			197 \$113	

J. U. THOMAS, Acting Secretary.

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APPENDIX No. 12.

REPORT OF THE PILOTAGE AUTHORITY FOR THE COUNTY OF CHARLOTTE, NEW BRUNSWICK, FOR THE YEAR ENDED \$1st DECEMBER, 1874.

St. Andrew's, January 20th, 1874.

Sir,—I have the honour to acknowledge receipt of your communication under date 7th instant.

Enclosed I hand you Pilotage Returns as nearly correct as I can obtain them.

The amount received for pilotage has to be obtained from the pilots, who with one exception, reside at the different outports and parishes of the County, and returns from four have not been had.

The regulations under the law were not in force here until late in the season, and

only ten pilots took out licenses.

Owing to depressed state of the lumber trade during the past season, not many essels arrived, and the receipts for pilotage are small.

I am, Sir, Your obedient servant,

C. E. O. HATHEWAY.

Commissioner.

To Wm. Smith, Esq.,
Deputy of Minister of Marine and Fisheries,
Ottawa.

PILOTAGE RETURNS for the County of Charlotte for the year 1874.

Name of Pilot.	Age.	For what service licensed.
William Cline	64	Pilot District of the County.
James Clark	66	do
Wellington Cline	33	do
John Boyd	48	do
Thomas Conley	44	do
Joseph Boyd	39	do
James D. Pine	50	do
William H. Conley	64	do∙
Edward Cline	59	do
Joseph Cline	26	do

RATES OF PILOTAGE.

1st. Pilotage District,	inwards or or	utwards	\$2	25 per	toot.
2nd. do	do		1	60 [*] d	0.
3rd. do	do		1	50 d	0.
To Campobello	do	20 cts. per fe	ot le	ss than	above.
4th. Pilotage District,	, inwards or o	utwards	\$1	00 per	foot.
From 1st November	to 1st April	20 cents pe	r foo	t addit	ional
rates. Harbour	Pilotage up	to 300 tons	\$2.5	0, over	300
\$3.00. River Pi	lotage in St.	Andrew's Ba	y up	to 200	tons
\$4.00, to 300 \$5					
River Pilotage, St. A.	ndrew's Bay	to any harbo	ır in	the Co	unty,
under 200 tons, \$	6.00, 300 tor	as \$8.00, 400	tons	\$10.00	, over
400 tons \$12.00.	•	•			

AMOUNTS RECEIVED BY PILOTS FOR PILOTAGE.

	Vessels	\$ 540	75
Foreign	Vessels.	541	65

AMOUNT RECEIVED BY COMMISSIONERS.

10 1	Licenses	and Regulations to Pilots	\$ 60 0 0	
1	do	for Pilot Boat,	5 00	
		Total		\$65 00

EXPENDITURE.

Printing branches, &c	1 00 1 50	\$10	00
		\$5 5	00

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(E. E.)

C. E O. HATHEWAY, Commissioner.

ST. ANDREW'S,

January 18th, 1875.

APPENDIX No. 13.

PILOTAGE RETURNS for the District of Pictou, in the Province of Nova Scotia, Dominion of Canada, for the year ended 31st December, 1874, as required by Section 24 of Chapter 54, 36 Vic., entitled: "An Act respecting Pilotage."

1.-LICENSED PILOTS.

No.	Name.	Residence.	Age.
1		Fisher's Grant	79
2		Boat Harbour	73
3		Little Harbour	70
4		Boat Harbour	56
5	George N. Powell		53
9	James Fraser		43
8	Bryan Rogers		39 35
9	William A. Cooke		აი 36
10	Henry H. Powell.		28
11	Charles Cooke		29
12	George W. Powell		23
13	Daniel S. Smith		23
14	John Robert Powell		26
15	Daniel McLeod		35
16	Ranald McDonald		48
17	William Munro		44

2.-CERTIFICATED MASTERS AND MATES, WHO ACT AS PILOTS.

No.	Name and Residence.	Vessel.	Tons.
1 2 3 4 5 6 7 8	S. E. Wright, of Boston B. F. Doane, of Boston Wm. Davison, of Quebec E. Evans, of Charlottetown, P.E.I R. Cameron, of Charlottetown, P.E.I J. P. Angrove, of Quebec	do "Alhambra" of Boston do "Secret" of Quebec do "St. Laurence" of P.E.I. do "Prince of Wales" do	491 1,400 1,050 466 685 675 722 455

3. Services for which the pilots were licensed "To undertake the pilotage of vessels of every description within and throughout the pilotage district of Pictou."

4. Services for which masters and mates were certified "To undertake the pilotage of the vessel named in his certificate, and of any vessel of her class for which he may be acting as master or mate at the time, but no other, within and throughout the limits in the pilotage district of Pictou."

68

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K m	••	1 4	.1							
5. The	e pilotage	dues for	the tin	ie being i	in force a	re as follo) ws:			
					ns \$6 in				1	
	do	150	do	300	10	do	6	do.		
	do do	300	do	400	7.4	do do	8 9	do.		
	do	400 500	ao	500 6 00	14 15	do	10	do.		
	do	600			16 16	do	11	do. do.		
	do	800	do do		17	do	12	do. do.		
And c	*				ts per to					rohe
80 tons, 4 d	ente ner	ton cutw	zard A	ill steam	era to he i	n mwaru wtadatr	et tor	nage	Casola u	iuci
" After	r coming	to in the	e harboi	ir all ves	sels requi	ring the	servic	es of ni	lots in a	ດໃກແ
up to the lo	ading w	narves at	the eas	t or midd	le rivers	shall pay	7 911 90	ditiona	sum of	25
cents per fo	ot draft	of water.	and the	same co	ming dow	n the riv	ers."-	-16th R	eaulation	n. 20
- [.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	······································		SWILLO CO.			01.0	1000	og wower.	-
6. Tota	al amoun	t receive	d for pil	otage due	es, \$3,520	00.				
					********		. \$2	640 00		
	Received	l from F	oreign s	hips			•	880 00		
		To	tal		• • • • • • • • • • • • • • • • • • • •		_		\$ 5,520	00
	Received	l from St	eamship	s s			. \$1	200 00	. ,	
	Received	l from Sa	ailing Ý	essels	• • • • • • • • • • • • • • • • • • • •	•••••	. 2	320 00		
		To	tal				_			00
									, ,	
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Daniel Dickson, Secretary

P_{ICTOU}, January 10th, 1875.

APPENDIX No. 14.

REPORT ON MONTREAL WATER POLICE FOR FISCAL YEAR ENDED SOTH JUNE, 1874.

Montreal, September, 1874.

Sir,—In obedience to your instructions I have the honour to submit the accompanying return shewing the number of prisoners arrested by the Montreal Water Police, and a statement of expenditure for the fiscal year ended 30th June, 1874.

The authorized number of constables (twenty) were sworn in on the first day of May, 1873, disbanded on close of navigation the 30th day of November, same year, and again

embodied on the 1st May, 1874.

The force for the fiscal year consisted, as heretofore, of one chief constable, four sergeants, and twenty constables.

The number of persons arrested was eight hundred and seventy, being an increase of

forty-one over last year.

There has been an increase of arrests for drunkenness of thirty-two, as also in the

number who have been sheltered.

There has also been a greater number drowned than in the preceding term, as also in the number saved from that fate. The former numbers thirty-five against twenty-three, being an addition of twelve, and thirty-nine against thirty-one in the saved.

A marked decrease has occurred in the crime of crimping, there having been fourteen arrests in the previous year and only six in that just ended, being a difference of eight cases. No measures have been relaxed in the endeavour to totally suppress the evil, and there is every reason to believe that the returns for the coming year will show still more favourable results.

The absolute necessity for a new station has, I am glad to say, been perceived by the Department, and it is to be hoped that a speedy change may be made from motives sanatory as well as improved accumulation. Should, however, the endeavour to procure a new building at reasonable terms prove abortive, it is to be hoped that the Department will consider the advisability of erecting a suitable structure on the Government lands adjoining the river, as suggested in the report of last year.

The increased rent that will be demanded for premises, independent of the requisite alterations, would, it is computed, more than pay the interest on the capital invested,

besides the advantages to the Department of adaptation.

It is but necessary to recall the previous representations as to the inability of the force, from its paucity, to afford anything like the protection required and demanded by the increased wharfage and tonnage of the port. It is to be hoped that some measures will be originated which will enable the Department to meet the expenses that will have to be incurred in carrying out the requirements of the shipping and mercantile community in this respect.

The official visits and inspection of the Honorable the Minister of Marine and Fisheries, and those made by yourself render further remarks unnecessary. I therefore close this, my annual report, with thanks for the continuous courtesy of the Department,

exemplified in all my relations with yourself.

CHAS. J. COURSOL, Commissioner Dominion Police.

WM. SMITH, Esq., Deputy Minister Marine and Fisheries, Ottawa.

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APPENDIX No. 15.

REPORT OF THE CHIEF OF THE RIVER POLICE, QUEBEC, FOR THE SEASON OF NAVIGATION ENDED NOVEMBER 30TH, 1874.

Sir,—I have the honour to submit my report for the season of navigation, 1874.

Appended to the report is a statement giving the number of persons arrested by the River Folice, the various offences committed by those persons, and their nationality.

On the 10th May the River Police were sworn in for duty. The force consisted of

One Chief, who is also Shipping Master for the Port, and whose pay is...... \$1,200 per annum 2 40 per day One Assistant Chief..... 1 90 One steersman..... 1 80 Six coxswains..... 1 50 Twenty-seven constables..... One engineer..... 50 00 per month 25 00 One assistant engineer.....

On the 1st June it was found necessary to increase the force by the addition of ten men, the same number as last season, and a small steam yacht was also added to the force

with an engineer at \$40.00 per month.

The steam yachts are constantly on patrol during the day. The boats have each a crew of one coxswain and six men, who keep a constant patrol on the river from 5:30 P.M. until 5:30 A.M. on the following morning. The Harbour Master and his Assistant are furnished with a boat or a steam yacht when required.

Crimps and their runners, thanks to the late Act, are now totally put down in respect of going on board ships on their arrival in port, or during the time they remain.

The law may be considered severe, but the blood-thirsty acts of crimps and their run-

ners called loudly for protection of life and property on board of ships.

Crimps have not attempted to go on board ships during the present season of naviga A very few of their runners at first did so. Four were arrested, tried, convicted, and sentenced to two years imprisonment each, in the Penitentiary. None have since dared to attempt it.

The vigilance of the police, aided by signals from ships, have got the crimps (now

styled boarding masters) well under control.

A large increase in the number of ships and in their tonnage over 1873, has also increased the number of seamen and others who have been in custody of the police during

the past season of navigation.

While admitting that stringent measures and a large and effective police force has virtually put down crimping, yet I most respectfully recommend that the full force be kept up during the season of navigation, to enable it to carry out such measures as will prevent a recurrence of that nefarious trade, for any relaxation of vigilance of police duties, or insufficiency of the force would be immediately noticed and taken advantage of, and many years work to get crimping under control thereby forfeited.

> I have honour to be, Sir, Your most obedient servant,

> > R. H. RUSSELL,

Chief River Police.

Wm. Smith, Esq., Deputy Minister of Marine and Fisheries, Ottawa,

A STATEMENT giving number of persons arrested by the Quebec River Police, the various offences committed by those persons, and their nationality.

Desertion Absence without leave Refused to perform duty. Refusal to proceed to sea Neglecting to join ship Warrants for assaults. Assaults on board ship. Assaults on wharves and streets Assaults by Captains on crew. Assaults by Chief Mates on crew. Captains assaulted by crew. Chief Mates assaulted by crew. Drunk and fighting on board Drunk on wharves and streets Thefts on board ships. Thefts on board ships Thefts on shore. Stealing on a navigable river (rope). Cutting and stabbing with knife. Stealing boats and canoes. Desertion from parents. Impeding passengers Crimps' runners going on board without permission.	84 225 11 17 38 19 10 11 6 3 6 31 113 12 4 3 7 5 1 16 4
Harbouring a seaman who had deserted	1
Protection for the night	17
	789
NATIONALITY	
NATIONALITY.	187
England	187
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APPENDIX No. 16.

REPORT OF THE PORT WARDEN OF MONTREAL, FOR THE YEAR ENDED 31st DEC., 1874.

PORT WARDEN'S OFFICE, MONTREAL, 31st December, 1873.

SIR,—I have to report on the affairs of the office, and with reference to the amend-

ments made during the last session of Parliament to Acts relating to it.

The season opened at a later date than usual, but with a full volume of business, which continued the first two months of navigation. During this time it became necessary to appoint a Deputy Port Warden, who has rendered good service, and with his assistance the public requirements have been fully met.

The volume of shipments outwards having materially fallen off during the latter part of the season, it will be seen by the account herewith submitted that the revenue has fallen below that of last year. The office, however, is yet fully self-sustaining, without

any reference to the surplus accumulated in former years.

The amendment made last year in the law, and especially in the By-Laws, have met and overcome, in a great measure, the difficulties and dissatisfaction that arose in former years, chiefly on the part of vessel owners. The business of the season has been carried through with very general satisfaction to all the interests concerned, and I have much pleasure in being able to state that so far as known no vessel laden with grain at this port has been lost, with the exception of one, the "British Standard," which went ashore near Cape Race. There have arisen, however, questions that yet seem to suggest amendment in two clauses of the Act. They are these:

Clause 8.—"The Master of any vessel which has broken bulk, &c., &c."

It has been contended by the Master of a vessel; That after the hatches have been opened in conformity with the provisions of this Clause, he is exonerated from shewing cause why he should be relieved from liability from any damage that may come to view as the discharge goes on; damage which has been known, in some cases, to occur from insufficient dunnage, or improper stowage, or the like causes, for which the vessel and owners are usually held liable. I should recommend the survey of damaged goods to be made in all cases when practicable, on board the vessel, and before any removal from the position in which the damage occurred, and the onus of proof in every case to be upon the Master, before relieving the vessel from liability.

Clause 10 provides "That the Port Warden shall call to his assistance, if necessary, "in such survey (of damage to any vessel) one or more Carpenters, sail makers, riggers,

"shipwrights, or other persons skilled in their profession," &c.

Cases have occurred when it would have proved useful to have similar assistance of experts in the survey of damaged cargo, and I would suggest that this provision be ex-

tended, so as to be available in cases of survey of cargo.

I would respectfully repeat the suggestion made in my last annual report that the interests of the trade of the St. Lawrence would be served by the appointment of a Port Warden at Pictou and Sidney, ports at which many steamers leaving this, call for coal.

I am, Sir,

Your obedient servant,

William Smith, Esq., Deputy Minister of Marine, &c., Ottawa.

A. SCLATER. Port Warden.

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APPENDIX No. 17.

REPORT OF THE PORT WARDEN OF QUEBEC FOR THE YEAR ENDED 31st DECEMBER, 1874.

PORT WARDEN'S OFFICE, VICTORIA CHAMBERS, QUEBEC, December 31st, 1874.

Sia,—I have most respectfully to acknowledge the receipt of your letter of the 5th November ultimo.

In reply, I have the honor to inform you that the amendment Act relating to Port

Wardens has wrought satisfactorily during the past season.

The care and attention exercised over the loading and stowage of cargoes, and latterly the attention to coaling of steamships, their seaworthiness when loaded and coaled, I am of opinion has had considerable effect as to the safety of our carrying trade.

June, 1874.—The screw steamer Strathtay, 798 tons register, of Dundee, Small, master, loaded and cleared from the Port of Montreal with grain cargo bound to Britain, came to Quebec, and there completed her loading, having taken in the full complement of coals required for the completion of her voyage. On the 4th June, 1874, she proceeded to sea, evading the Port Warden's examination as to her overloading or seaworthiness; the Collector of Her Majesty's Customs at Quebec, and the Board of Trade, were immediately put in possession of the fact that the master of the above-named steamer had proceeded to sea after coaling without requesting to be furnished with the usual certificate.

Steam and other vessels when they leave Montreal with grain cargoes, are not full loaded until they are fully supplied with coals for the completion of their

voyage.

The certificate granted by the Port Warden for Montreal certifies that portion of cargo was shipped there, with the view of obtaining a final certificate as to her

seaworthiness when full loaded, coaled, with stores on board and ready for sea.

I am fully of opinion that no vessel, steam or sailing, loading part cargo of grain in Montreal, either inland of Quebec or within the limits of the Custom House of that port taking in cargo or part thereof with coals and stores, should in anything be exempt from the full operation of the Act. It frequently occurs that vessels cannot fill up all their different holds at Montreal with cargo, therefore those vessels with their holds not completely filled should be strictly examined at Quebec, to ascertain if the said holds are properly secured for the voyage, as the seaworthiness of the vessel depends entirely on the proper securing of the cargo. The free board of steam and sailing vessels remains a grievance amongst owners, masters and agents. From my experience of the Atlantic trade between this Continent and Britain, &c., with practical knowledge of the different description and classes of steam and other vessels trading to our waters, with the information obtained from the tables of Free Board of Vessels of 1st class, approved by the Association of underwriters in Liverpool, and those of Lloyds Register of British and Foreign Shipping, Oct., 1873; the tables of Free Board are for 1st class sailing vessels in salt water.

N.B.—This table is not intended to fix a hard and fast load line, but a fair line for ordinary trades.

Vessels of peculiar type, or other than first class to have a free board regulated

according to the circumstances of the case.

On this subject I have endeavored to base my views in regulating of the load line of the vessels of different construction, I am convinced that I have been following, to the best of my judgment, a safe policy; for the proof of this the season has now closed without accident to any of our vessels grain loaded from the river St. Lawrence, that have come under the supervision of the Port Wardens.

I have the honour to be, Sir,

Your most obdt. and humble servt.,

JOHN DICK,

Port Warden.

To Hon. A. J. Smith,

Minister of Marine and Fisheries,

Ottawa, Ont.

APPENDIX No. 18.

REPORT OF THE SHIPPING MASTER FOR THE PORT OF QUEBEC FOR THE FISCAL YEAR, ENDED 30th JUNE, 1874.

The number of seamen shipped from the 1st the 31st December, 1873, inclusive, was			59
From which deduct the crews of ships regist and new ships; also seamen who engaged their vessels, and whose substitutes were out paying fees	but did not e shipped v	join with-	.09
Total number paying fees	•••••••	1,0	50
Number of British ships that shipped se above period			.85
	,,		43
	,,		24
	" "	,,	13
Total number of ships			65
Number of vessels which paid no fees, construction registered ships	· · · · · · · · · · · · · · · · · · ·		24
New ships	• , , ,	•••••	13 —
Total	••••	•••••	37 —
Number of seamen discharged paying fees Number of seamen shipwrecked and dis whom no fee was charged	charged, a	gainst	
Total number discharged	• •••••		166
Fees received from 1,050 seamen shipped at Fees , 286 seamen discharged Fees , 217 certificates	l	\$1,050 138 108	82
Total amount received		\$1,297	32
Disbursements as per account rendered	•••••	571	48
Balance in the hands of the shipping ma	ster	\$725	84

REPORT IN ACCORDANCE WITH ACT OF PARLIAMENT 36 VIC., CHAP. 129, SECTIN $_{\mathbf{O}}$ 20.

BRITISH SHIPS.

The number of ships that shipped seamen from the 1st January, 1874, to the 30th June, 1874	62
Number of seamen shipped in said period	343
Deduct these who engaged and did not join their vessels, and whose substitutes were shipped without fees	18
whose substitutes were surpred without rees	
Total number paying fees	3 25
Number of seamen discharged Deduct shipwrecked seamen, for whom no fee was charged.	
Total number paying fees	71
SHIPS OF THE DOMINION OF CANADA.	
The number of new ships that shipped seamen	
Total	. 37
Number of seamen shipped	405
tutes who were shipped without paying fees	55
Total number paying fees	350
foreign ships.	
The number of vessels that shipped seamen	
Number of seamen shipped	57

APPENDIX No. 19.

REPORT OF THE SHIPPING MASTER FOR THE PORT OF ST. JOHN NEW BRUNSWICK, FOR THE FISCAL YEAR ENDED 30TH JUNE, 1874.

SHIPPING OFFICE,

St. John, N.B., July 29th, 1874.

Sir,—I have the honour to hand you a statement of the income and expenditure of the shipping office at this port, for the year ended the 30th June, 1874.

The number of seamen shipped, discharged, &c., during the year represents 4,793, against 4,957 for the year 1872-73, being a decrease of 164 men as compared with the

previous year.

Desertion has been very small compared with previous years, owing in part to the stringency of the present law, to the large number of seamen from the United States seeking employment at this port, and to the large number of ships, of Norway, Sweden, France, North German and other European nations, which have arrived at this port during the past year. The seamen of this class of shipping seldom desert.

In consequence of the large supply of seamen, wages have fallen to average \$40 for

the run, and monthly to \$22.

Up to the present time the shipowners have not combined to establish the five day notes, as directed under the Act, they paying the advance in cash to the boarding masters, who, having control of the seamen, refuse to let them ship until the merchants promise to advance the cash in the same manner as before the present Act became law.

I am, Sir,

Your obedient servant,

ALLAN McLEAN.

Shipping Master.

The Hon. A. J. SMITH,

Minister of Marine and Fisheries, Ottawa.

STATEMENT OF FEES COLLECTED AND EXPENSES OF THE SHIPPING OFFICE AT THE PORT OF ST. JOHN, N.B., FOR THE YEAR ENDED 30th JUNE, 1874.

EXPENSES.

ALLAN McLEAN,

SHIPPING OFFICE, St. John, N.B., July 20, 1874. Shipping Master.

Shipping Office, St. John, January 2nd, 1875.

Sir,—I have the honor to hand you returns of the Shipping Office at this port for the half year ended 31st December, 1874, showing an increase of 516 men shipped and discharged as comparing with the corresponding half year ended December 31st, 1873. This is owing to the increased number of new vessels fitting out this fall, and to the large number of men being paid off from vessels laying up earlier than usual, owing to the depression in the freight market, and as a consequence, wages have fallen to the low figure of \$16.00 by the month, and to \$30.00 for the run.

am, Sir,
Your obedient servant,

ALLAN McLEAN,

Shipping Master.

The Hon. A. J. SMITH,

Minister of Marine and Fisheries, &c., &c., &c., Ottawa, Canada.

REFURN to the Department of Marine and Fisheries in accordance with the provisions of the Act 36 Vic., chap. 129, by the Shipping Master (or officer acting in that capacity) at the Port of St. John, in the Province of New Brunswick, for the half year ended December 31st, 1874:—

From which deduct the following expenses:-

> ALLAN McLEAN, Shipping Master.

Sr. John, N.B., January 2nd, 1875.

APPENDIX No. 20.

REPORT OF THE SHIPPING MASTER FOR THE PORT OF HALIFAX, NOVA SCOTIA, FOR THE CALENDAR YEAR ENDED 31st DECEMBER 1874.

STATEMENT showing number of men shipped and discharged at the Shipping Office, Halifax, N.S., from 1st January, 1874, to 30th June, inclusive; also expenditure in connection with the same.

((of Seamen lo lo lo lo lo lo	shipped in do do do do do	February, March, April, May,	260\ 126 164 302 434 321	do do do	\$25 20 20 20 20 20
			1	.607		
1,607 Number	, at 50 cen of men di	ts per ma scharged	ing the pa	st half-year, st half-year,	\$803	00
1,120	, at 30 cen	ts per ma	n		336	00
	J	l'otal		******	\$1,139	50
		EXPE	NDITURE.			
			-	cidental ex	62 0	00
	$\mathbf{Net}_{\mathbb{C}^2}$	amount	·		\$519	50

JOHN D. CUMMINS, Shipping Master.

Halifax, N.S., June 30th, 1874.

Halifax, N.S., January 12th, 1875.

SIR,—Enclosed please find a return of seamen shipped and discharged at this office, for the half year ending 31st December, 1874, which I hope will prove satisfactory. Wages have ruled from July to October at \$23, from then to 10th December at \$20 and \$18. Since then they have taken a rise again to \$20, at which rate they now are, and \$50, \$40 and \$35 for the runs to Britain.

I have the honour to remain, Sir,

Your most obedient servant,

JOHN D. CUMMINS,

WM. SMITH, Esq.,
Deputy of the Minister of Marine and Fisheries,
Ottawa.

Shipping Master.

RETURN to the Department of Marine and Fisheries in accordance with the provisions
of the Act 36 Vic., chap. 139, by the Shipping Master (or officer acting in that
capacity) at the Port of Halifax, in the Province of Nova Scotia, for the half year ended, 31st December, 1874.
1,557 seamen shipped, paying 50 cents each

1,230 seamen discharged, paying 30 cents each	
Amount of fees received	1,147 50
Frem which deduct the following expenses, viz.:	
Assistant	\$200 00
Office Rent	
Stationery, Fuel, and incidental expenses	
*	558 00

Amount reverting to Shipping Master\$589 50

JOHN D. CUMMINGS, Shipping Master.

RALIFAX, N.S., 1st January, 1875.

APPENDIX No. 21.

REPORT OF THE SHIPPING MASTER FOR THE PORT OF PICTOU, NOVA SCOTIA, FOR THE HALF YEAR ENDED 31st DECEMBER, 1874.

SHIPPING OFFICE,

Pictou, N.S., July 31st, 1874.

Sir,—I herewith enclose returns of Seamen shipped and discharged at this Office, together with expenditure for the half year ending 30th June, 1874, which I trust you will find correct and in order.

I am, Sir,

Your obedient servant,

MALCOLM CAMPBELL

WM. SMITH, Esq.,

Shipping Master,

Deputy of the Minister of Marine and Fisheries, Ottawa.

STATEMENT of Income and Expenditure in connection with the Shipping Office, for the Port of Pictou, N.S., for the half year ending 30th June, 1874.

303 men shipped at 50 cents	\$151 50 56 10	
m 3		900# A

LESS.

DECO.			
One half year's salary of Deputy at \$200 per annum.	\$100 00		
do Office rent at \$120 per annum	60 00		
Printing, stationery and incidental expenses	16 00		
		176 00	
		\$ 31 60	

MALCOLM CAMPBELL.
Shipping Master.

APPENDIX No. 22.

REPORT OF THE SHIPPING MASTER FOR THE PORT OF LUNENBURG, FOR THE HALF YEAR ENDED 30th JUNE, 1874.

LUNENBURG, N.S., July 1st, 1874.

SIR,—I send the returns of the number of men that arrived and sailed from the Port of Lunenburg. I received fees to the amount of forty-two dollars for shipping and discharging men. The remainder of the vessels sailed in and out of port without the masters coming to my office, and the Collector of Customs cleared and entered those vessels without my certificate. He says he has no instructions as to my office and will not recognize it.

I have the honor to be, Sir,
Your most obedient servant.

WILLIAM YOUNG,

WILLIAM SMITH, Esq., Deputy Minister of Marine and Fisheries, Ottawa.

Shipping Master.

STATEMENT shewing the number of seamen shipped and discharged at the Shipping Office, Lunenburg, N. S., from January to June, and also the expenses connected with same:—

Num	ber of	seamen shi	pped during	January			
	"	"	"	February		• • • •	
	"	,,	,,	March			
	"	,,	"	April			
	"	,,	"	May			
	,,	"	33	June	. .		24
						2	60
Num	50 cts. ber of a	per head (seamen dis	(260) charged duri	ing those mo	onths at	\$ 130	
						169	00
			BAPENDI				
				· · · · · · · · · · · · · · · · · · ·	25 0 0		
Stati	onery a	and incide	ntal expense	es	5 00		
						70	00
						99	90

WILLIAM YOUNG,

Shipping Master.

APPENDIX No. 23.

REPORT OF THE SHIPPING MASTER FOR THE PORT OF LIVERPOOL FOR HALF YEAR ENDED 30TH JUNE, 1874.

LIVERPOOL, N.S., July 10, 1874.

Sir,—I beg to enclose returns of fees collected at this office for six months ending June 30th, 1874.

I have the honor to be, Sir,

Your most obedient servant,

W. A. KENNY.

WM. SMITH, Esq., Deputy Minister of Marine and Fisheries, Ottawa.

RETURN of fees collected at the Liverpool Shipping Office, from December 31st, 1873, to June 30th, 1874.

384 seamen shipped, 50cts	\$1 92 68	
·	8260	

H. & O. K.

W. A. KENNY,

Shipping Master.

LIVERPOOL, N. S., July 1, 1874.

APPENDIX No. 24.

REPORT OF THE SHIPPING MASTER FOR THE PORT OF LITTLE GLACE BAY, FOR THE HALF YEAR ENDED 30th JUNE, 1874.

LITTLE GLACE BAY, C.B., 22nd July, 1874.

Sir,—Enclosed I have the honour to forward list of fees collected at this Shipping Office for the half year ended the 30th June last.

I have the honor to be, Sir,

Your obedient servant,

R. McNEIL, Shipping Master.

To the Honorable

The Minister of Marine and Fisheries, Ottawa.

RETURN of Fees collected at the Shipping Office of Little Glace Bay, for half year ended 30th June, 1874.

Date.	Name of Vessel.	Master.	From	Nature of Service.	Amount of Fees.
June 8th June 12th	"Zebra" "Little Fury". "Celeste" "St. George". "W. L. G." "Ashler"	Wright	Havre	Shipping & endorsing do do	4 00

I hereby certify the above account to contain a full and correct list of all fees collected at this Shipping Office for half year ended the 30th June, 1874.

R. McNEIL, Shipping Master.

LITTLE GLACE BAY, C.B., July 21st, 1874.

APPENDIX No. 25.

REPORT OF THE SHIPPING MASTER FOR PORT MEDWAY FOR THE YEAR ENDED 30th JUNE, 1874.

MARINE SHIPPING OFFICE, PORT MEDWAY, July 10th, 1874.

SIR,—As I had no particular forms for sending you a return of the fees collected at this Port, I waited thinking some particular form of return might be sent. As none have come to hand, I beg leave to enclose amount of fees collected at this office for quarters ended March and June.

I remain, yours respectfully,

JOSEPH J. LETSON, Shipping Master

WM. SMITH, Esq.,
Deputy Minister of Marine, &c., Ottawa.

Amount of fees collected at this office for the quarter ended June 30th, 1874.

Shipping men, Brigatine "Alpha" Discharging men, "Maud Potter"		
Total	\$ 3	30

Amount of fees collected at this office for the quarter ended March 31st, 1874.

do	Schooner "	"Etna" Eureka" "Alpha"	2	00
	Total.	* * *	\$ 9	00

J. J. LETSON, Shipping Master.

APPENDIX No. 26.

STATEMENT showing results of certain returns respecting shipping and discharging of Seamen, received by the Department of Marine and Fisheries in accordance with the provisions of the Act 36 Vic., Chap. 129, from Shipping Masters throughout the Dominion, for the half year ended 31st December, 1874.

QUEBEC.

Name of place Seamen Shipped Amount Shipped Amount Shipped Amount Shipped Amount Shipped Amount Shipped Seamen Shipped Seame		i v	1	1
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Say St. Paul Secontains Secondains S			ļ	
Secommains Sec	Dam Gt. Davi			49 Cu
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New Carliale	Isquimaux Point			
Perce	Vow Carlisle	11	.8	7 90
Simouski Stanstead Stans	religaburg			56
Stanstead Stan	erce			
NEW BRUNSWICK.	tangtagd			
NEW BRUNSWICK. 14	te. Anne des Monts	· · · · · · · · · · · · ·		
14	adousac		2	60
14			<u> </u>	
Sathurst 11 14 9 70 Jampbellton 55 30 36 50 Jaccagne 30 10 18 00 Jaccagne 8 7 6 10 10 Jaccagne 8 7 6 10 10 Jaccagne 8 7 6 10 10 Jaccagne 104 79 75 70 75 70 10 Jaccagne 104 79 75 70 10 10 Jaccagne 70 40 47 00 10 10 Laccagne 70 40 40 10 Laccagne 9 2 5 10 10 Laccagne 9 2 5 10 10 Laccagne 10 4 79 75 70 10 Laccagne 9 2 5 10 10 Laccagne 10 4 79 75 70 10 Laccagne 10 4 79 75 70 10 Laccagne 10 4 79 75 70 10 Laccagne 10 4 79 70 10 Laccagne 10 4 70 70 10 10 Laccagne 10 4 70 70 10	NEW BRUNSWICK.			
Suctore Suct	llma		. <i>.</i>	7 00
Sampbellton	Sathurst	.		0.70
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t. Stephen 9 2 5 10 ackville. 44 8 24 40 hedisc 8	t. John			
NOVA SCOTIA.	t. George	70		
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ornwallis 65 32 50 65 5 00 rench Cross 7 5 5 00				. 3.00
rench Cross 7 5 5 00			i	
	ligby		5	5 00
57 89			l • • • • • • • • • • • • • • • • • • •	

STATEMENT showing results of certain returns respecting shipping and discharge of Seamen, &c.—Continued.

NOVA SCOTIA.-Continued.

Name of place.	Seamen Shipped.	Seamen Discharged	Amo	unt
Setson's Cove			8	cts.
Guysboro'		4 000		~~
Halifax Hantsport	1,557	1,230	1,147	50
Harbour au Bouche	7	2	4	10
La Have Little Glace Bay Liverpool Lockeport, Lunenbung Mahone Bay Margaretsville Maitland. Merigomish New Glasgow North Sydney Parrsboro' Pictou Port Hawkesbury Port Hood Port Gilbert	90 21 373 175 74 14 	63 19 293 150 95 7 	186 7 821 1	20 40 50 50 10
Port Latour Port Medway Port Mulgrave	47	133	33	40
Port Williams. Pugwash and Port Philip. Ratchford's River. Richmond	15	••••••	7	50
River Bourgeois. St. Mary's River. Ship Harbour. South Bar Sydney Takamagouche. Thorne's Cove. Tusket Wallace. Weymouth	7 2 81 5 2 38 20 14	4 4 61 5	58 2 2 19 11	70° 20° 80° 50° 50° 50° 00°
BRITISH COLUMBIA.				
Victoria	10	1 5	<u> </u>	50

WM. SMITH, Deputy Minister of Marine, &c.

OTTAWA, January, 1875.

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SUPPLEMENT

(No. 4)

TO THE SEVENTH ANNUAL REPORT OF THE DEPARTMENT OF MARINE AND FISHERIES,

Being for the Fiscal Year ended 30th June, 1874.

REPORTS

ON THE

MET EOROLOGICAL, MAGNETIC

AND

OTHER OBSERVATORIES

OF THE

DOMINION OF CANADA,

FOR THE

CALENDAR YEAR ENDED 31st DECEMBER, 1874.



OTTAWA:

PRINTED BY I. B. TAYLOR, 29, 31 and 33 RIDEAU STREET.

1875.

DEPARTMENT OF MARINE AND FISHERIES.

OTTAWA, 1st January, 1875.

Sir,—I have the honour to submit herewith Supplement No. 4 to the Seventh Annual Report of the Department of Marine and Fisheries, being for the Fiscal Year ended 30th June, 1874; containing the Reports on the Meteorological, Magnetic and other Observatories of the Dominion of Canada for the Calendar Year ended yesterday.

I have the honour to be, Sir,

Your most obedient servant,

WM. SMITH,

Deputy Minister of Marine and Fisheries.

TER HON. ALBERT J. SMITH, M.P.,

Minister of Marine and Fisheries.

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APPENDIX No. 1.

FOURTH REPORT

OF THE

METEOROLOGICAL OFFICE OF THE DOMINION OF CANADA, FOR THE YEAR ENDED 31st DECEMBER, 1874.

BY G. T. KINGSTON, M. A., SUPERINTENDENT.

To the Honourable

The Minister of Marine and Fisheries.

Sir,—In my third report I gave in general terms a brief description of the objects to be attained by a Meteorological System, and of the agencies necessary for carrying them into effect.

I shall now again refer to, and make some suggestions for improving the efficiency of these agencies.

CENTRAL OFFICE.

As before stated, the functions of this office are as follows:-

1. To select all stations and observers.

2. To exercise, by visitation and correspondence, supervision over all stations.

3. To regulate the methods and times of observations.

4. To compile Meteorological Returns, and to publish them, or deductions from them.

5. To receive telegraphic reports, and to despatch by telegraph, to various points, either the facts received, or opinions founded on them.

REMARKS ON THE FUNCTIONS OF THE CENTRAL OFFICE IN RELATION TO STATIONS.

The efficiency of a station, depends on the skill, knowledge, and other qualities of the agent in charge, on the quality of the appliances at his command, and on a judicious selection of site. When a person, qualified by previous study, is placed in charge of a station, it is probable that he will only need instruction on certain conventionalities, to become all that is desired: but, as the points where stations are most necessary are often those where no experienced observer resides, it becomes necessary either to send an observer to the station, or to procure the services of some person on the spot, whose premises are suitable, and to instruct him, as one best can.

I believe that it would greatly contribute to the improvement of our system, if we possessed a small corps of well qualified observers, who might be made available wherever needed, especially if the service required a station at some remote locality, where no resident, qualified by education and circumstances, could be found to undertake the charge of it.

There are three modes of communicating to an agent the instruction necessary to his

Proficiency, of which, the two latter are essential.

1. By causing him to attend a preparatory course of instruction.

2. By supplying to him, printed and written instructions; and by promptly calling his attention to any defects that may by discovered in his reports.

3. By furnishing oral instruction, by a Station Inspector.

To train a permanent corps of observers, by causing them to go through a regular course at head quarters, or to instruct other observers who, for that purpose, might visit the central business of the office.

Printed and written instructions alone, without oral instruction, are not sufficient.

Although many of the mistakes that occur in a report, will be detected by a practised examiner; yet, there will be a large number which he has no means of discovering; nor is it certain whether those which he does discover, as well as others which escape detection, are caused by accident, or chronic misconception. Moreover, to correct errors whether in principle or in detail, by letter, involves great waste of labour at the Central Office; and although the practice can never be completely dispensed with, it might be materially lessened by giving adequate oral instruction, not only before the agent takes charge of the station, but also from time to time afterwards. No amount of culture, on the part of an observer in charge, can supersede the necessity of systematic visitation, and the need is vastly greater when the observer has had little previous instruction or experience in Meteorology.

If no other reason for visitation existed, the services of an inspector are still imperatively required, for determining the errors of instruments. The determination of the errors of the instruments, by comparison with portable standards, is necessary from time to time, even when they have been previously ascertained, because errors are liable to change; but it is still more necessary at those stations which have been furnished by private persons, and where no determination of the errors has previously been effected. To shew that anxiety regarding a knowledge of instrumental errors is not mere punctiliousness, I remark that the prognostication of weather (the only immediate practical use of meteorology in the opinion of some persons) depends chiefly on a knowledge of the differences of the barometric pressures at the same instant, at different stations; differences which will be either reversed, concealed, or exaggerated, wherever an uncompensated error in a barometer, is allowed to remain; and which if they do not necessarily baffle the sagacity of the examiner of the weather maps, are certainly liable to endanger the soundness of his interpretations.

Faulty barometric reports are due, not only to uncompensated instrumental errors, but to errors in the supposed heights of the barometer above sea level. This also is a fruitful source of embarrassment to the officer whose duty it is to interpret weather maps, and its removal is one among the duties which a station inspector, is called on to perform.

Some of the duties of an inspector when establishing a new station, are as follows:

1. To see the instruments placed in suitable exposures, and to superintend the erection of any necessary structures connected with them.

2. To determine the height of the barometer above sea level.

3. To ascertain by comparison with portable standards, whether the barometer and thermometers have undergone any change, since being completely tested, and to subject them to a complete testing if they have not already undergone that process.

4. To remain a few days at the station, until the observer has become fairly acquainted

with his ordinary duties.

When the inspector visits a station already in operation, he should examine the condition of all the instruments, supply new corrections if required, see to any repairs that might be needed, replace defective instruments by others, clean the mercury of the barometer, and see to the setting up of any apparatus, that it might be desired to bring into use. He would also confer generally with the observer, and call special attention to any defects which had been detected in the method of his taking the observations, or in his written reports.

That regular inspection is essential to the well being of a meteorological system, has been admitted in every country where Meteorological work is carried on on a large scale, and

the want of it would be fatal to Meteorology in Canada.

In the signal service of the United States, inspectors are constantly employed. Canada the extent of country is nearly as great, and from inferior facilities in travelling practically greater; and moreover the need of inspection is much greater, because the observers do not, as in the United States, go through a preliminary course of instruction, and pass are examination before receiving their appointments.

In Canada, all the instruction is given by mail, or during rare and hasty visits by myself or one of my staff; visits of the requisite frequency and duration being incompatible with other duties; in fact, there are numerous stations which, so far from being inspected

in the year, have never once been visited.

INTERNAL WORK OF THE CENTRAL OFFICE.

- Examination of instruments issued, and record of the character, error, and destination of each.
 - Devising and constructing various kinds of apparatus.

Devising and seeing to the preparation of various forms of registration and compu-

tation; and keeping a record of the supplies of stationery to each station.

4. It is estimated that about 8400 pages of tabular matter, are received at the office from stations, in the year; or an average of about 27 pages for each working day, exclusive of storm reports and postal card reports. The mere transcription and collation of this mass, apart from drawing deductions from it, would be a heavy task, if all the reports were to come to hand in a perfect state; but, before these reports are turned to any use, it is the practice to examine each, carefully, and to call the attention of the sender to any faults which the examination may have revealed.

This correction and instruction by letter, is sometimes repeated, again and again to the same person, with reference to the same fault, in consequence of misconceptions, many of

which the visits of an inspector would easily remove.

- With a view to facilitate the work of the weather office at Washington, an institution in whose success Canada has a deep interest, we furnish abridged copies of the weekly reports from all our telegraph stations, and from a few others, amounting in all to eighteen Pages weekly.
- Regular weather telegrams from thirteen Canadian stations are received three times daily at Toronto, which after examination, are forwarded to Washington, with the corresponding reports of the weather at Toronto.

Similar tri-daily reports from Fort Garry reach Toronto, after being first sent to Wash!

ington.

7. In exchange for the written and telegraphic reports furnished to Washington, we teceive reports from a few of the U.S. stations by telegraph, and from all the rest by mail.

(8). The reports which reach Toronto by telegraph are not numerous enough to justify the attempt of founding prognostications on them; nor, even if adequate materials were available, is the staff of the office strong enough to work them up with the necessary rapidity. thas been found expedient therefore to rely, for storm warnings, almost entirely on those furnished from Washington.

(9). Three times each day, the height of the barometer, the temperature, state of the weather, and direction and velocity of the wind, at all the telegraph stations in North America, are stamped in on weather charts, which thus form a mass of data of very great value

for future investigation.

(10). Correspondence forms a heavy addition to the work of the office, as may be Sathered from the fact that nearly one thousand letters were received in the year ended 31st December, 1874, and more than one thousand letters were written, not including postal cards,

and the acknowledgment of weekly and monthly reports.

(11). Another part of the work of the office is the computation of monthly means and of monthly resultant winds; the collection of the materials from the various stations in forms suited for exhibiting the dependence of the several elements on the time, on the position of the station, and on each other, the computation of interpolating formulæ, and miscellaneous investigations.

CHIEF STATIONS.

As stated on former occasions, the primary function of the class of stations to which I have applied this name, is to record observations from which may be computed, corrections for diurnal, and non-periodic variations.

The meteorological elements may be recorded by a continuous automatic process, or by

Observations, day and night, at equal intervals not exceeding three hours.

To introduce gradually at Canadian chief stations, self recording apparatus, similar to that in use at the observatories connected with the London Meteorological office, is much to 5---11

be desired. At present, the only station, even partially furnished with such apparatus, is that at St. John's College at Winnipeg, where, by private munificence, without Government aid, an anemograph has been set in operation by the Bishop of Rupert's Land at a cost of about \$500. Another instance of the heartiness which characterizes the authorities of the same institution, was shewn by their bearing the expense of sending one of their officers to Toronto, to spend six weeks at the Observatory for the purpose of perfecting himself as observer at Winnipeg.

MONTREAL (CHIEF STATION)

Until the appointment of Mr. McLeod to the care of the observatory belonging to McGill College, and his appointment at the same time to be meteorological correspondent with this office, the meteorological operations at Montreal station were confined to those of a telegraph reporting station, with three additional sets of observations daily, at 7 a.m., 2 p.m. and 9 p.m. On the appointment of Mr. McLeod, the first act of the authorities of McGill Cellege, was to send him, at the expense of that institution, to spend some time for instruction, at the Toronto Observatory.

The position of McGill College, on account of its proximity to the mountain, is singularly ill adapted for one very important class of observations, those which relate to the wind; and the position of the observatory is even worse than that of the College building. In order then to remove the serious defects to which the wind observations at Montreal had been subject, on account of the above named cause, it was essential to obtain a position for an anemometer and wind vane, that might be exposed to wind, unaffected by the action of the mountain. On due consideration, it was resolved to expose the instrument on a pole erected on the summit of the mountain, and to connect it by telegraph wires, with the recording apparatus in the observatory. This arrangement was carried into effect as soon as the weather would allow; a vane and anemometer being temporarily placed on the cupola of the Coilege.

Mr. McLeod commenced the observations of a telegraph reporting station on 1st February, 1874, and on 1st August, he commenced those of a chief station, by taking six additional sets of observations, at times separated by intervals of three hours from the morning and afternoon telegraph hours. The anemometer and vanc on the cupola were in use from 4th February to 1st August, since which time, the directions and velocities of the wind, are those given by the vane and anemometer on the mountain.*

QUEBEC (CHIEF STATION).

For the establishment of this station, I am indebted to the public spirit of Lieutenant-Colonel Strange, R. A. and to the skill and fidelity of the non-commissioned officers under his command, who, without any remuneration, have carried on, for several months, a system

The direction of the wind is not recorded by the instrument, but it may be known at any moment, by trying which of the four vane wires, by making circuit, is found to act on the anemometer magnet. If the north wire only sounds, the wind is nearer to north than to any other of the eight points, but if north and east wires both sound, the wind is nearer to N. E., and so on for the other wires, or pairs of wires. Electrical clock anemometers, and wind vanes, similar to that at Moutreal, are in use at t'ort Stanley, Woodstock, Father Point, Charlottetown, Chatham and H. lifax. Clock anemometers, not worked with a battery are

in use at about 20 stations.

^{*}Note.—The anemometer on the cupola is of the kind, to which I have given the name: "Clock Anemometer." from the circumstance that the motion of the wind is recorded by the dial of a common clock. A set of Robinson's cups is connected with the escapement wheel, in such a manner, that for every revolution of the cups, the escapement wheel advances one tooth; the length of the arms being such that one mile of wind is indicated by an advance of four minutes of the clock, and 180 miles by twelve hours. This contrivance, for which I am indebted to the ingenuity of Mr. Menzies of the Toronto observatory and his son is in price about one-third of that of an ordinary anemometer, and possesses moreover this advantage, in which the latter is deficient, that the distance between the cup, and clock, can be safely increased to ten feet, if necessary, so as to reconcile, to some extent, the antagonistic conditions of due exposure of the cups to the wind, and convenient access to the dial, by the observer. In the electrical clock anemometer, the unction of the escapement wheel is regulated by an electro-magnet connected by wires with a key near the revolving cups, which, by pressing on the key complete an electrical circuit at each revolution.—The frequency with which the circuit is made and broken, is a serious objection to this arrangement, and for long circuits, as at Montreal, it is liable to interruption. For this reason it is desirable to replace it by a seif recording apparatus, also worked by electricity.

The direction of the wind is not recorded by the instrument, but it may be known at any moment, by

of observations in the citadel at every second hour of the day and night. To Master Gunuer Donaldson, who has drawn up all the reports, special thanks are due, for the admirable manner in which he has performed that service.

REDUCTION OF THE OBSERVATIONS OF CHIEF STATIONS.

For the full reduction of the observations, it is necessary to wait until a number shall have been accumulated, sufficient for the elimination of peculiarities of single years. In the tables, therefore, which accompany this report, the observations from chief stations take a place similar to that of the ordinary stations.

TELEGRAPH STATIONS.

The only new telegraph station during the past year, is one which was set in operation, in September last, at Parry sound in Georgian Bay, a position in which it was very desirable to place a station. The instrumental arrangements are most satisfactory, the anemometer being mounted on a wooden tower 30 feet high, erected, by the kind permission of Mr. Beatty M. P. P. on some high ground of which he is the owner; and where the anemometer and vane have a most perfect exposure.

DRUM STATIONS.

By reference to the list, it be will seen that there are 35 stations to which storm warnings are occasionally forwarded from Toronto, exclusive of Montreal, where, although there is no drum, Mr. C. S. Blackman has kindly undertaken to receive warnings addressed to Montreal, and post up notices in various parts of the city.

Storm warnings were issued on 56 different days in the course of the year, the total

number being 544.

To Quebec and points westward, the number of days on which warnings were issued was 29, and the number of warnings 222.

To points below Quebec and the Lower Provinces the days of warning were 34, and the number of warnings 322.

The warnings distributed among the several months were as follows:--

Jan 8	Apr51	July 0	Oct 99
Feb42	May44	Aug16	Nov 104
Mar 4	June 64	Sep70	Dec 42

As complaints, not altogether groundless, have frequently been made of the unsatisfactory character of the warnings, and of the tardiness of their delivery, especially to the Lower Provinces; a few words are here desirable relative to the meaning of a storm warning, the nature and causes of the defects complained of, and means to be used for removing them.

Meaning of a Storm Warning.

A storm warning is a publication of an opinion to the effect that, shortly after a time specified, or implied, a storm will probably occur in some portion of a certain region, within a radius of 100 miles of the port warned. The port which receives the warning must be regarded as merely a convenient point for advertising a fact, which is applicable, not to it alone, but to the whole region. Indeed, if it were certain that the port in question would be exempt, the publication of the warning would be proper, either to deter ships from running into the storm, or to prepare them to encounter it.

Nature, carses and care of faults in storm warning.

Faults in the opinious published, when they occur, are largely due to insufficient data, arising, either from a too contracted area of observation, the blanders of incompetent observers, or failure in prompt delivery of reports to the central office.

These faults are to be remedied by adding such new telegraph reporting stations as may be necessary, the adoption of a regular system of visitation, the removal of incompetent or careless observers, and the enlargement of telegraphic facilities.

Another difficulty encountered by the officer who prognosticates weather, arises from the very imperfect means of his command for learning to what extent his former prognostications have been verified. It is part of the duty of a Drum Station agent, to report the results of all storm warnings, and also to report storms that have occurred, for which no warnings were received. This duty has been very imperfectly performed in many cases; but were it other wise; the ports where observers and Drum Stations are established, are quite insufficient in number to furnish an adequate history of the storm.

To supply the additional materials necessary, I suggest that all lightkeepers within easy reach of the Post Office, and other government officials at inland places as well as on the coast, whose services the department think fit to employ, may be required as part of their regular duty to report promptly by mail, in a very brief manner, the circumstances attending any

gal; that may occur in their neighbourhood.

FAULTS IN TRANSMISSION.

Faults, from tardy transmission, are more frequent than those from other causes: the reason of this may easily be explained. The probabilities are worked out at Washington three times daily, and the warnings, if any, unless delayed through telegraphic neglect, or accident, reach the Toronto office soon after 10 a.m., 7 p.m. and 1 a.m. The warnings received at 10 a.m. will reach their destination in good time, unless through telegraphic delays. Those received at or after 7 p.m. are usually just too late for the small telegraph offices in the Lower Provinces, which, owing to the difference in time, are then closed; but the warnings are usually, although not always, in time for western stations. Those received at 1 a.m. cannot be delivered until the next morning, at any of the ports excepting Halifax, St. John, Montreal, and Quebec, on account of the closing of the telegraph offices.

For the better delivery of the 7 p.m. warnings to small eastern ports, the only remedy will be either to keep the telegraph offices open for one hour later, or to work out the probabilities at Toronto. For promptly delivering the 1 a.m. warnings to small stations. I see, at

present, no remedy.

The delays with respect to the small eastern ports, are considerably lessened by an arrangement with the agent of the Western Union Telegraph Company at Sackville, who receives at night any warnings destined for them, and forwards them very early the following morning.

The above is respectfully submitted,

G. T. KINGSTON,
Superintendent of the Meteorological Office.

M eteorological Stations in Correspondence with the Central Meteorological Office, Toronto.

CHIEF STATIONS.

		A STATE OF THE STA
Province.	Station.	Superintendent.
Nova Scotia	Sydney	T. C. Hill.
New Brunswick	Sydney Halifax St. John	Frederick Allison, M. A. G. Murdoch, C. E.
Quebec.	FrederictonQuebec	Dr. Jack, Professor, Harrison N. Brunswick. Lt. Col. Strange R. A. C. H. McLeod, McGill College.
Ontario	Montreal	C. H. McLeod, McGill College. J. Montgomery, Frofessor of N. Science Canadian Literary Institute
Manitoba. British Columbia.	Winnipeg Spence's Bridge	Canadian Literary Institute. Officers of St. John's College. John Murray.

^{*} From May, 1874,

REPORTING TELEGRAPH STATIONS.

Station.	Observer.	Station.	Observer.
(1) Sydney, C.B., N. Scotia. (1) Halifax, N. Scotia. Chatham, N. B. Cape Rozier, Quebec Father Point, Quebec. (3) Quebec, Quebec. (1) Montreal, Quebec. Ottawa, Ontario	T. C. Hill,	Kingston, Ontario Toronto, Ontario Port Dover, Ontario Port Stanley, Ontario Saugeen, Ontario Parry Sound, Ontario (2) Fort Garry, Manitoba	S. Woods, M. A. Observatory. H. Morgan, M. Payne. K. Stewart Rev. R. Mosley. James Stewart.

¹⁾ also Chief: (2) also First Class Ordinary Stations; (3) also Second class ordinary Station.

RESERVE TELEGRAPH STATIONS.

Station.	Observer.	Station.	Observer.
St. Andrews, N. B	Dr. Gove. H. J. Cundall.	Brockville, Ontario	W. R. Bigg. R. J. Cole.

⁽²⁾ Also First Class Ordinary Station.

DRUM STATIONS.

Station.	Person in charge.	Station.	Person in charge.
(b) St. Andrews, N. B. (1) St. John, N. R. (d) Digby, N. S. Yarmouth, N. S. Liverpool, N. S. (1) Halifax, N. S. (e) Cow Bay, N. S. Little Glace Bay, N. S. (1) Sydney, N. S. (2) Port Hasting, N. S. Pictou, N. S. Pictou, N. S. Point du Chene, N. B. (b) (c) Charlottetown, P. E. I. (a) Chatham, N. B. (c) Bathurst, N. B. (d) Dalhousie, N. B. Percé Gaspé Basin.	G. Murdoch. W. H. Taylor. J. E. Clement. J. L. Hemmeon. F. Allison. C. Archibald. H. Rigby. T. C. Hill. Peter Grant. M. Campbell. J. B. Forster. H. J. Cundall. G. A. Blair. Hon. J. Ferguson. H. A. Johnson. P. Vibert.	Port Hope, O	J. B. Donaldson. C. S. Blackman. S. Woods H. B. White. T. F. Janes. Robt. Kerr. Light Keeper. G. Black. E. F. Dwyer. D. Hughes. H. Morgan. M. Payne. G. N. Macdonald. Dr. Martyn. Thos. Davis. J. Mackenzie.

⁽¹⁾ Chief Station. (a) Reporting Telegraph Station. (b) Reserve Telegraph Station. (c) First Class Ordinary Station. (d) Second Class Ordinary Station. (e) Third Class Ordinary Station.

ORDINARY STATIONS.

Station.	Observer.	Station.	Observer.
Nova Scotia.		Quebro.	
Class I.		Class I.	
Windsor, Hants Guysborough, Guys Truro Wolfville, Kings King's College. Windsor	Miss Fraser. S. R. Russell James Little Prof. Higgins. Rev. Canon Hensley.	Huntingdon	1
Class II.	D.D.	Bird Bocks	67
Digby	W.'H. Taylor. J. Hanlon.	Signature of the state of the s	E. Chapman. E. Pope. M. Colton. P. Godier.
Sand Point	J. Mundell.	Class III.	
North Canso	G. McRay.	Danville Lachine Road, Montreal	H. B. McKenzie. J. Hall.
Beaver Bank (b) Cow Bay, C. Breton (b) Port Hastings, do Baddeck, Victoria Louisbourg, C. Breton	James Grove. C. Archibald. P. Grant. R. Elmsly. T. Shewen.	+ (N. D. de Lévis	Ladies in residence.
Newfoundland.		Ontario.	
St. John Harbor Grace	John Delany. A. Munn.	Class I. London, Middlesex Little Current, Algoma	T. Read, M.D. G. B. Abrey, C. E.
Fogo Channel Bay St. George	James Fitzgerald. W. S. Green.	Class II.	
P. E. ISLAND. Class I. (a) (b) Charlottetown Class II. Georgetown	H. J. Cundall.	Dundas, Wentworth Ingersoll, Oxford Brampton, Peel N. Gwillimbury, York Gravenhurst, Muskoka Fitzroy Harbor, Carleton Welland, Welland Granton, Middlesex *Temiscamangue, Nipissing Point Clark E Pelee Island Pelee Island Pelec Island	J. Reynolds. Rev. Canon Ritchie. T. M. Robinson. Rev. James Tait. A. Willet. J. Grant.
New Brunswick. Class I.		S Clapperton Island	C. Paton. P. McIntyre. D. McG. Lambert.
Bass River (6) Bathurst	Rev. J. Fowler. Hon. J. Ferguson.	#Temscamangue, Nipissing. Point Clark Pelee Island Clapperton Island Pelee Spit. Chantry Island. Nottawasaga Island. Red Horse Rock. Griffith Island. Amherstburg.	G. Collins. J. Buck. V. C. Hill. A. Hacket.
(b) Dalhousie Restigouche	i	Class III. Georgina York Orilia Simcoe (b) Fort Dalhousie	j
Dorchester	E. V. Tait.	(b)Goderich	G. N. Macdonald.

^{*}Temiscamangue no report received.

*Reporting Telegraph Station, (a) Reserve Telegraph Station (b) Drum Station.

†A number of other convents have been equipped in a similar manner, from which no reports have been received.

ORDINARY ST \TIONS- Continued.

Stations.	Observer.	Stations,	Observer,
Manitoba.		Manitoba. Class III.	
Class, I,		Little Britain, Lisgar	D. Gunn.
(a) Fort Garry Edmonton	Ì	British Columbia. Class I.	
Whitewold	W. G. Finney.	Esquimault Harbor New Westminster	W. H. Bevis. A. Peele.

STATIONS from which Special Weekly Reports of Observations made at 7.25 a.m., Toronto time, are received.

Stations.	Observer.	Stations.	Observer.
Nova Scotia. (b) Glace Bay	C. H. Rigby. S. R. Russell.	ONTABIO. Cornwall	J. B. Dixon, M.A. James Grant. C.J. Macgregor, M.A. H. J. Strang, B. A. J. H. Johnson, M. A.

⁽a) Also a Reporting Telegraph Station. (b) Also Drum Stations. (c) Also First Class Ordinary Station.

STATIONS,—Continued.

Instrument and Books have been supplied to the following Stations in the North-West Territories.

Stations.	Observer.	Remarks.
Athabasca	Rev. W. W. Kirkly	
Rampart-House, Rat River Fort Simpson Fort Revolution Gt. Slave Lake	F. Samison, Esq., A. McFarlane, Esq., C. T J. Bunn, Esq., Rev. J. McKay	Under the Superintendence of the Bishop of Athabasca.

Class I.

Officer in charge. Instruments and Registers supplied to Lt.-Col. French and Officers of the N. W. Mounted Police.

Lighthouses to which Instruments and Register Books have been supplied, but from which no Returns have, as yet, been received.

Province.	Lighthouses.	Province.	Lighthouses.
1	Coffin Island. Beaver Island. Scatter Island	ONTARIO	Anticosti. Snake Island. Pigeon Island. Sulphur Island. Christian Island.
New Brunswick	Seal Island. Machias Island. Escuminac Point. Miscou Island.	i i	Red Rock, St. Ignace,
	·	[

LIST OF TABLES ACCOMPANYING THE FOURTH ANNUAL REPORT OF THE SUPERINTENDENT OF THE METEOROLOGICAL OFFICE OF CANADA.

- Table I. Barometer at 32° Fahrenheit and reduced to sea level, observed at various stations in the Dominion of Canada at the same absolute time as follows:—Toronto civil time, 7:25 a.m., 4:25 p.m., 10:50 p.m. Greenwich civil time, 0:43 p.m., 9:43 p.m., 4:08 a.m., (of next day.)
 - II. Temperature of the air observed at various stations in the Dominion of Canada at the same absolute times as in table I.
 - Tables A and B (supplementary to Tables I and II), shewing the direction and velocity of the wind at various stations at the same absolute times.
 - III. Showing for some of the stations named in Tables I. and II., and for each of the three hours of observation given in those tables, the means for each month and for the year, of the reduced barometer and of the temperature of the air; and also the resultant direction and resultant velocity of the wind for each month and for the year.
 - IV. Mean temperatures of the several months at stations in the Dominion of Canada, from September, 1873, to December, 1874, inclusive.
 - V. Highest temperature in each month at the several stations in the Dominion of Canada, from September, 1873, to December, 1874, inclusive.
 - VI. Lowest temperature in each month at the several stations in the Dominion of Canada, from September, 1873, to December, 1874, inclusive.
 - VII. Mean temperature in each quarter and in the year, from September, 1873, to December, 1874, with the highest and lowest temperatures in the year, and the date of their occurrence.
- VIII to XXIII. Daily mean temperatures at certain stations in the Dominion of Canada.
 - XXIV. Means of daily temperatures at the stations in Tables XXII. and XXIII., collected in five day periods from September, 1873, to December, 1874, inclusive.
 - XXV. Percentage of cloud in each month and in the year, at certain stations in the Dominion of Canada, from September, 1873, to December, 1874, inclusive.
 - XXVI. Rainfall in each month and in the year, at the several stations in the Dominion of Canada, from September, 1873, to December, 1874, inclusive; the stations in Ontario being divided into districts.
 - XXVII. Quarterly rainfall at the several stations, with the fall of snow in each month, and the total precipitation of rain and melted snow from September, 1873, to December, 1874, inclusive.
 - XXVIII. Number of days on which rain fell in each month and in the year at the several stations in table XXVI.
 - XXIX. Quarterly number of days of rain, with the number of days of snow, during the period September, 1873, to December, 1874, inclusive,
 - XXX. Quarterly average depth of rain in the several Provinces, with the average depth of snow in each month and in the year from September, 1873, to December, 1874, inclusive.
 - XXXI. Quarterly average number of days of rain in the several Provinces of the Dominion of Camus, and the number of days of snow, from September, 1873, to December, 1874, inclusive.

- XXXII. Average depth of rain in inches for the several Provinces of the Dominion of Canada, from September, 1873, to December, 1874, inclusive.
- XXXIII. Average number of days of rain in the several Provinces of the Dominion of Canada, from September, 1873, to December, 1874, inclusive.
- XXXIV. Comparison of the rainfall of different years in the several districts of Ontario, and in the different Provinces, 1869 to 1874, inclusive.
 - XXXV. Differences between the rainfall at stations in Table XXVI., and the average rainfall derived from three or more years. The differences being marked (+), or (--), according as the rainfall in Table XXVI. is greater or less than the standard with which it is compared.

XXXVI. Differences between the mean temperatures in Table IV. and the average temperatures, derived from three or more years. The difference being marked (+), or (—), according as the means in Table VI. are greater or less than the standards with which they are compared.

XXXVII. Abstract of Meteorological Observations made during the year 1872-3, at the Lighthouse, S. W. point of the Island of Anticosti, Gulf of St. Lawrence, by Mr. E. Pope, in charge of lighthouse.

REMARKS ON THE TABLES.

Tables 1., II. and III.—Times of observation.

The times of observation given in these tables are those employed at all the telegraph reporting stations in North America. Most of the stations report by telegraph to Toronto three times daily; but there are some which report only by mail. Of these, some take the observations at all three hours, some omit the night hour, and some observe only in the morning.

For the morning observations at Cornwall, Peterboro', Stratford, Goderich, and Windsor, I am indebted to the Principals of the High Schools at those places, who, by permission of the Rev. Dr. Ryerson, Chief Superintendent of Education in Ontario, have kindly taken these observations, in addition to the three required by the Department of Education.

During January, 1874, when observations were suspended at Montreal on account of the death of Dr. Smallwood, three reports, at the proper hours, were telegraphed from Brockville, but after 31st January, when the Montreal observations were resumed, the night observation at Brockville was taken at 9 p.m. (local time), or 8:46 p.m. (Toronto time), instead of 10:50 p.m. (Toronto time).

BAROMETRIC CORRECTIONS.

The readings of the barometer at some stations will be found to differ, through several months at the commencement of the year, from those published in the daily bulletins of the Washington Signal Office. This is owing to errors, which were afterwards corrected.

At other stations, later in the year, the barometers, for determining whose errors no opportunity had been afforded, were found to be affected by errors, to be presently stated, and for which the corrections had not been applied in Table I.

Again, there are a few stations which were not supplied with barometers from the Toronto office, and which have not been visited for verifying either the error of the instrument or the supposed height above sea level.

At Toronto the standard barometer has a tube with an internal diameter of .506

inches, and should require, therefore, a correction for capillarity of only .003.

Frequent measurements of the meniscus, however, have lately led to the belief that the capillarity now amounts to 007, a belief that has been confirmed by comparison with

numerous barometers recently verified at Kew, and from which it is inferred that, after applying the correction for the capillarity 007, the Toronto standard does not differ from that at Kew by more than 001. In determining the errors of other barometers, this error of 007 in the Toronto standard is allowed for. This correction has been applied to the means in Table III., but not to the separate readings of Table I. In November, 1874, a comparison was made at Portland between the Toronto and Washington standards, by means of two travelling barometers, when it was found that, after the application of known corrections, the Toronto standard is higher than that at Washington by 014.

At Halifax the barometric entries are too high by .025 up to 1st December, after which this correction was applied until 22nd December, when the baromoter was broken and another brought into use. The exact error of the new instrument has not been ascertained; but after the application of the assumed correction, the readings are obviously too low. In Table I. the entries of the barometer from 1st January to 30th November require a correction of —025. This correction has been applied in Table III.

At Quebec, the barometric entries in Table I. from 1st January to 30th September

require a correction of + 050. This has been applied in Table I.

At Brockville, the barometric entries require a correction of —059 throughout the year. This has been applied in Table III.

At Kingston, the readings, from some unexplained cause, appear to be too high.

At Windsor, the barometer appears to require a correction of about -050, but whether from instrumental error, or imperfect determination of level, is not known. This correction has not been applied in Table I. In Table III. the means have been corrected for all known errors.

ANEMOMETERS.

Halifax.

The only position for an anemometer, allowing convenient access to the dial, was very defective as regards exposure. On 11th November an electrical arrangement was brought into use whereby the exposure was greatly improved.

Charlottetown, P.E.I.

An electrical anemometer was brought into use 29th October, in nearly the same position as that occupied by the instrument previously employed.

Chatham, N. B.

An electrical anemometer was brought into use 21st October. The exposure was materially the same as before, but the friction was considerably lessened.

Montreal.

From 1st February to 31st July the direction and velocity of the wind were found by a vane and anemometer above the cupola of McGill College. After which date a vane and anemometer mounted on a pole, on the top of the mountain, and connected with the observatory with six telegraph wires, were brought into use.

Port Stanley.

The position of the village is very ill-suited for obtaining an exposure for the vane and anemometer. During the summer, a vane and anemometer were mounted on a small tower on a ridge of hills about $\frac{1}{8}$ of a mile from the observer's residence, and were connected with the recording apparatus by telegraph wires. These instruments have been in use since 12th July, but have been subject to occasional failures and interruptions.

Tables IV. to XXXVI.

In previous reports the tables terminated with the summer quarter, August inclusive, in order to give time for collecting returns from distant stations; but with a view to uniformity with the resolution of the Vienna Conference in 1873, to the effect that the meteorological year should coincide with the civil year, and be divided into quarters, commencing respectively in January, April, July and October, the results for the last four months of 1873, and for the whole of 1874, are given in this collection, in accordance with the resolution referred to.

REMARKS ON THE COMBINATIONS EMPLOYED FOR OBTAINING MEAN TEMPERATURES.

Unless otherwise stated, the mean temperatures given are the arithmetic means of the temperatures observed at 7 a.m., 2 p.m., and 3 p.m.; double weight being given to the latter hour.

At Wolfville and Glace Bay, N.S., the morning observations, which were taken at 8 a.m., are reduced to 7 a.m. by the application of corrections given by the Halifax bi-hourly observations; but at the Glace Bay station from June the means are derived from the observed daily maximum and minimum temperatures.

At Welland and N. Gwillimbury, Ontario, where 8 a.m. has been used, the same plan has been followed, using the Toronto bi-hourly series.

Stations.	Time of Observation.
Halifax, N.S.,	Equal interval of three hours.
Sydney, N.S.,	" "
Spence's Bridge, B.C.,	"
Woodstock, O.	" "
Fredericton, N.B.,	"
Montreal, Q.,	"
St. John's College, Manitoba.	"
Quebec, LtCol. Strange,	" of two hours.
St. John, N.B.,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Toronto. 6,	8 a.m., 2, 4, 10 p.m., and midnight.
Goderich, Stratford	
Barrie, Windsor,	
Simcoe, Hamiltor Peterborough, Belleville Pembroke, Cornwall	1, } 7 a.m., 1 p.m., 9 p.m.
Pro Pombroka Commell	,
Brampton,	and and
Dundas,	9 a.m. and 9 p.m. 8 a.m. and 8 p.m.
Channel, Newfoundland,	8 a.m., 2 p.m., 8 p.m.
Dalhousie, New Brunswick,	7 a.m., 2 p.m., 7 p.m.
Charlottetown, P. E. Island,	8 a.m., 2 p.m., 10 p.m.
Quebec Observatory,	Daily maximum and minimum.
aparosco c ssc. (area, y)	zwij mwimum and mmimum.

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m.

10 50 p. m.

Greenwich ,,

0 43 p. m.

9 43 p.m.

4 08 a. m. (of next day).

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.		1st	Januar	y.	2nd	Janua	y .	3rd	Janua	ry.	4th	Janua	r y .
Glace Bay,	N. S.												
Sydney,	,,	3·43	3.52	3.60	3.58	3.44	3.30	3.32	3.40	3.41	3.37	3.22	3.17
Guysborough,	,,	3.40			3.52	,		3.32			3.32		
Halifax,	,,	3.37	3.44	3.21	3.35	3.27	3.28	3.36	3.39	3.41	3.38	3.27	3.23
Charlottetown, l	P.E.I.	3.36	3.44		3.42	3.58	3.53	3.36	3.38	. :	3.23	3.17	
Chatham,	N.B.	3.42	3.23	3.53	3.43	3.26	3.27	3.39	3.33	3.24	3.20	3.12	3.00
Bathurst,	,,					,	•						
Father Point,	Q.	3.08	3.12	3.13	3.14	3.14	3.22	3.20	3.12	2.93	2.89	2.74	2.25
Quebec,	,,	3.53	3.22	3.25	3.27	3.24	3.30	3.18	3.07	2.96	2.92	2.79	2.66
Montreal,	,,						•						١.
Cornwall,	Ont.						•						
Ottawa,	,,	3.14	3 14	3.19	3.23	3.21	3.21	3.14	2.95	2.93	2.87	2.67	2.8
Brockville,	,,	3.12	3.15	3.16	3.16	3.18	3.17	3.10	2.96	2.94	2.90	2.71	2.97
Kingston,	٠,	3.16	3.21	3.21	3.21	3.25	3.25	3.16	3.05	3.02	2.97	2.81	3.08
Peterborough,	,,		l j ·									, .	
Toronto,	,,	3.09	3.09	3.12	3.14	3.14	3.10	3.00	2.83	2.89	2.78	2.62	3.24
Port Dover,	,,	3.08	3.10	3.15	3.16	→·14	3.10	2.99	2.85	2.89	2.82	2.67	3.27
Port Stanley,	,,	3.10	3.08	3.12	3.14	3·13	3.09	2.97	2.86	2.89	2.81	2.80	3.32
Windsor,	,,												
Granton,	,,							;				.	.
Stratford,	,,												·
Goderich,	,,												
Kincardine,	,,] .			١.,			! !				
Saugeen,	,,	2.96	2.98	3.04	3.07	3.10	2.98	2.78	2.64	2.69	2.60	2.83	3.35
Stayner,	,,	3.04	3.05		3 09	3.09		2.87	2.78				
Little Current,	,,										١.		
Fort Garry,	Man.	2.59	2.56	2.48	2.38	2.34	2.52	2.78	2.96	3.16	3.28	3.28	3.2

Table II .- Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich "

7 25 a.m. 0 43 p.m.

4 25 p.m. 9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

Stations.		1st	Januar	у.	2nd	l Janus	ry.	3rd	Janua	ry.	4th	Janua	ry.
lace Bay,	N.S.	• •	°	8	9		°	•	.	0	0		
Sydney,	,,	19	21	21	24	36	38	36	34	3 3	37	39	44
dysborough,	,,	22			28			37			34		
Halifax,	,,	32	33	33	36	39	40	36	34	35	40	44	42
Charlottetown, I	- 1	26	30		35	36	36	33	33		35	44	
.	N.B.	13	23	25	29	31	32	25	32	33	38	43	48
Bathurst,	,,					.							
Father Point,	Q.	26	28	29	29	30	27	25	35	38	43	49	49
Quebec,	,,	24	24	24	22	23	23	30	37	39	40	48	47
Montreal,	,,						•						┊.
Cornwall,	Ont.											7.	١.
Ottawa,	,,	23	34	25	25	31	31	32	36	40	46	56	42
Brockville,	,,	30	34	29	33	36	3 6	39	38	46	47	56	43
Kingston,	,,	34	36	36	34	36	38	40	46	45	48	59	53
Peterborough,	,, {										.		١.
Toronto,	,,	27	36	35	35	36	38	40	47	43	46	51	29
Port Dover,	,, l	32	34	33	34	36	38	40	43	41	44	46	28
Port Stanley,	,,	34	35	34	34	36	37	39	40	40	42	49	27
Windsor,	,,	•											
Granton,	,,		١.										١.
Stratford,	,,		.										
Goderich,	,,) .					Ì.
Kincardine,	,,	34	37	33	 34	37	38	40	51	52	57	27	24
Saugeen,	,,	24	35	33	35	37	38	44	52	54	55	32	24
Stayner,	,,	27	32		33	38		40	49				
Little Current,	,,												
Fort Garry,	Man.	5	17	25	25	29	12	-5	 -6	-17	-26	-16	-2

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m.

10 50 p.m. 4 08 a.m. (of next day.) 9 43 p.m. Greenwich ,, 0 43 p.m.

The Height of the Barometer = 27 inches + the number in the Table:

Stations		5t.	h Janu	ar y .	6t1	i Janu	ary.	7t]	h Janu	ary.	8t	h Jan u	ary.
Glace Bay,	N.S.												
Sydney,	,,	3.09	3.29	3.45	3.71	3.74	3.67	3.49	3.22	3.14	3.21	31.2	2.97
Guysborough,	,,	3.12		١.	3.66			3.41	.	ļ •	3.15	١.	
Halifax,	,,	3.15	3.29	3.49	3.70	3.68	3.28	3.36	3.18	3.13	3.10	2.98	2.80
Charlottetown,	P.E.I.	3.02	3.36		3.79	3.75		3.34	3.12	3.09	3.10	2.96	.
Chatham,	N.B.	3.02	3.42	3.67	3.93	3.77	3.67	3.38	3.08	3.08	3.09	2.86	2.65
Bathurst,	"			.				.					
Father Point,	Q.	8.21	3.26	3.74	3.88	3.73	3.45	3.21	3.09	3.12	2.86	2.60	2.38
Quebec,	,,	3.33	3.57	3.67	3.75	3.55	3.30	3.06	3.00	2.91	2.73	2.36	2.44
Montreal,	,,						۱.						
Cornwall,	Ont.						٠.						١.
Ottawa,	,,	3.55	3.67	3.74	3.61	3.29	3.11	2.98	2.90	2.76	2.45	2.42	2.53
Brockville,	,,	3.49	3.59	3.62	3.52	3.21	3.05	2.90	2.84	2.71	2.47	2.49	2.63
Kingston,	,,	3.54	3.64	3.69	3.54	3.18	3.10	2.91	2.86	2.67	2.46	2.51	2.68
Peterborough,	,,										١.	 	
Toronto,	,,	3.56	3.58	3.55	3.36	3.08	3.04	2.88	2.79	2.62	2.48	2.55	2.69
Port Dover	,,	3.55	3.23	3.21	3.26	3.05	2.95	2.86	2.71	2.58	2.53	2.65	2.73
Port Stanley,	,,	3.57	3.52	3.20	3.25	3.06	3.00	2.90	2.75	2.70	2.57	2.69	2.75
Windsor,	,,												
Granton,	,]		•								 ,		١.
Stratford,	"												١
Goderich,	,,									,•			
Kincardine,	,,	.]				.	.				.		
Saugeen,	,,	3.55	3.55	3.49	3.33	3.23	3.05	2.99	2.91	2.72	2.21	2.16	2.64
Stayner,	,,	3.53	3.58	, .	3.33	3:16		3.01	2.88		2.49	2.59	,
Little Current,	,,	.									.		
Fort Garry,	Man.	3.07	2.76	2.80	2.97	2.99	2.95	2.65	2.68	2.68	2.54	2.47	2.63

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich "

7 25 a.m. 0 43 p.m.

4 25 p.m. 9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

Stations.	ļ	5tl	Janu	ary.	6tl	Janus	ry.	7t1	Janu:	ary,	8th	Janua	rý.
Glace Bay,	N.S.	•	°		· .	.		•	, °	°	0		
Sydney,	,,	46	35	31	20	21	25	29	39	41	3 3	37	47
Juysborough	,,	44	١.		23	١.		30		١.	46		
Halifax,	,,	46	45	33	22	25	30	34	47	46	42	48	i i 51
Charlottetown,		47	32		19	20		31	38	42	38	47	١.
Chatham,	N.B.	50	31	15	6	16	18	24	30	33	31	32	48
Bathurst,	,,			١.	١.		١.		l .	! ! .	Ì.		
Father Point,	Q.	23	16	15	1	11	14	14	10	9	2	28	40
Quebec,	,,	20	16	9	9	12	15	25	29	25	27	33	34
Montreal,	,,		١.							<u> </u>			 .
Cornwall,	Ont.						١.	١.	.				
Ottawa,	,,	16	20	15	13	16	27	30	32	34	37	33	34
Brockville,	"	19	21	 17	17	21	29	32	32	33	32	34	34
Kingston,	,,	23	24	18	24	22	31	31	32	33	34	35	33
Peterborough,	,,					!			! ! .				~
Toronto,	,,	24	27	24	23	29	25	27	32	33	33	34	27
Port Dover,	"	23	30	23	25	32	30	30	32	32	32	32	31
Port Stanley,	,,	24	28	24	26	30	28	29	33	33	30	32	33
Windsor,	"							.				.	"
Granton,	į												
Stratford,	,,				1 .						i .	'	
Goderich,	"] : .				
Kincardine,	"	24	26	23	24	28	27	29	33	29	30	32	32
Saugeen,	1	25	25	18	23	26	26	28	30	29	28	33	25
Stayner,	"	25	26		23	24		27	32		31	33	43
Little Current,	"									•		33	١.
Fort Garry,	,, Man.	14	16	17	0	18	13	22	29	16	18	18	6

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich ,

0 48 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

The Height of the Barometer=27 inches + the numbers in the Table.

Stations.		9th	Janua	ry.	10th	Janus	ry.	11th	Janus	ry.	12tl	ı Janus	ry.
Glace Bay,	N.S.												
Sydney,	in	2.75	2.70	2.73	2.76	2.79	2.82	2.76	2.74	2.71	2.85	2.96	3.08
Guysborough,	,,	2.70			2.75			2.72			2.85		
Halifax,	"	2.70	2.71	2.71	2.76	1 ·76	2:71	2.75	2.72	2.71	2.89	3.02	3.14
Charlottetown,	P.E.L	2.69	2.71		2.78	2.76	2.73	2.72	2.68		2.83	2.99	3.14
Chatham,	N.B.	2.70	2.69	2.74	2-87	2.74	2.60	2.73	2.71	2.70	2.88	2.99	3.12
Bathurst,	w										•		
Father Point,	Q.	2.56	2.64	2.68	2.68	2.65	2.25	2.55	2.55	2.55	2.80	3.03	3.26
Quebec,	,,	2.59	2.70	2.67	2.54	2.21	2.54	2'57	2.58	2.69	2.98	3.18	3.31
Montreal,	,,								. !			.	
Cornwall,	Opt.												
Ottawa,	21	2.72	2.62	2.52	2.43	2.49	2.47	2~5 6	2.79	2.94	3.14	3.35	3.46
Brockville,	,,	2.73	2.64	2.55	2.48	2.56	2.56	2.61	2.80	2.97	3.20	3.33	3.41
Kingston,	,,	2.73	2.64	2.56	2.81	2.56	2.60	2.66	2.89	3.01	3.50	3.41	3.49
Peterborough,	,,											.	
Toronto,	,,	2.68	2.24	2.46	2.49	2.58	2.60	2-73	2.92	3.08	3.24	3.38	3.46
Port Dover,	,,	2.67	2.52	2.21	2.53	2.57	2.65	2.81	2 97	3.14	3.32	3.44	3.46
Port Stanley,	,,	2.67	2.53	2.53	2.55	2.60	2.68	2.85	3.03	3.17	3.36	3.44	3.48
Windsor,	,,] .			l ·			ļ ļ .] .			
Granton,	**	١.		١.				,.			ļ .		
Stratford,	,,												 •
Goderich,	,,		.		١.						١.		
Kincardine,	,,			.			١.				ļ .	j .	
Saugeen,	,,	2.59	2.47	2.41	2.38	2.47	2.54	2.79	3.01	3.13	3.23	3.38	3.40
Stayner,	,,	2.61	2.46		2.42	2.47					3.25	3.42	
Little Current,	,,												: •
Fort Garry,	Man,	2.81	2.80	2.82	2.98	3.13	3.23	3.37	3.41	3.41	3.42	3.49	3.6

1874.

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich ,,

7 25 a.m. 0 43 p.m.

4 25 p.m. 9 48 p.m. 10 50 pm. 4 08 a.m. (of next day.)

Stations.		9th	Janua	ry.	10tl	h Janua	ry.	11th	Janua	ry.	12tl	Janus	ıry.
Glace Bay,	N.S.	•		â	۰			•	°	•	-	•	•
Sydney,	,, Î	47	44	35	34	37	33	34	35	33	3 3	30	27
Guysborough,	,,	50			38			35			31		
Halifax,	,,	43	39	38	36	34	37	33	35	33	31	29	27
Charlottetown, 1	- 1	41	38		36	35	34	33	35		30	26	20
Chathani,	N.B.	38	36	28	29	35	35	28	33	32	25	20	15
Bathurst,	,,							.					
Father Point,	Q	36	33	29	21	23	21	29	29	24	11	11	9
Quebec,	,,	32	31	30	29	30.	29	29	30	19	9	12	9
Montreal,	,,												
Cornwall,	Ont.												١.
Ottawa,	,,	26	35	32	33	32	31	29	23	14	11	14	4
Brockville,	,,	32	35	34	3 3	31	30	30	28	18	9	19	10
Kingston,	,,	34	36	35	34	32	31	31	27	19	18	21	13
Peterborough,	,,	•											ł .
Toronto,	,,	32	32	34	30	30	31	29	28	23	21	25	17
Port Dover,	,,	32	33	31	28	30	29	28	26 •	20	20	20	14
Port Stanley,	,,	33	32	32	32	30	29	27	25	21	14	24	9
Windsor,	,,							١.			١.		١.,
Granton,	,,					∮ .		j .			١.		
Stratford,	"												
Goderich,	,,						١.						١.,
Kincardine	,,	29	83	32	30	32	31	27	30	23	22	22	20
Saugeen,	,,	28	32	32	29	32	31	24	25	22	18	18	18
Stayner,	,,	28	33	1,.	30	33					21	15	
Little Current,	,,				١.						! .		
Fort Garry,	Man.	~8	6	:-3	0	3	-4	-16	- 8	11	_12	-13	-20

TABLE I.—Barometer at 329 Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich ..

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day).

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.		13tl	Janua	ry.	14th	Janus	ry.	15th	Janua	ry.	16tl	Janua	r y .
Glace Bay,	N.S				.								•
Sydney,	,,	3.25	3.32	3.38	3.41	3.06	2.54	2.40	2.48	2.45	2.41	2.43	2.57
Guysborough,	,,	3.27	.]	.	3.36			2.44		•	2.43		
Halifax,	,,	3.34	3.38	3.42	3.34	2.71	2.28	2.52	2.50	2.43	2.43	2.53	2.61
Charlottetown, l	P.E.I	3.30	3.36		3.42	2.86	2.31	2:39	2.45		2.41	2.49	2.63
Chatham,	N.B.	3.41	3.36	3.52	3.23	3.00	2.56	2.39	2.40	2.44	2.48	2.48	2.67
Bathurst,	"												•
Father Point,	Q.	3.40	3.35	3.37	3.41	3.12	2.80	2.53	2.33	2.31	2.32	2.31	2.46
Quebec,	,,	3.43	3.44	3.45	3.27	2.94	2.80	2.67	2.45	2.40	2.46	2.70	2.97
Montreal,	,,	•					•						
Cornwall,	Ont.									•			
Ottawa,	,,	3 51	3.43	3·28	3.05	2.88	2.86	2.90	2.76	2.76	2.96	3 ·15	3.28
Brockville,	,,	3.20	3.39	3.24	2.99	2.88	2.89	2.86	2.81	2.85	3.03	3.12	3.28
Kingston,	,,	3.54	3.41	3· 2 6	3.00	2.95	2.96	2.93	2.91	2.95	3.11	3.18	3.38
Peterborough,	,,							! • •			i • •		
Toronto,	,,	3.44	3.25	3.05	2.97	2.95	2.96	3.02	2.97	3.04	3.19	3.28	3 3
Port Dover,	,,	3.43	3.22	3.02	3.01	3.05	3.08	3.08	3.06	3.10	3.24	3.30	3.40
Port Stanley,	,,	3 44	3.21	3.06	3.03	3.13	3.12	3.14	3.12	3.13	3.26	3.33	3.42
Windsor,	,,	٠.	, .								١.		
Granton,	n	٠.	١.				.						
Stratford,	,,		,.			١.			.				
Goderich,	,,												
Kincardine,	,,										.		
Saugeen,	,,	3.44	3.28	3.18	3.00	3.01	3.07	3.10	3.13	3.13	3.20	3.31	3.32
Stayner,	,,	3.46	3.24		3.01	2.97		3.05	2.99		3.21	3.29	
Little Current,	"		١.	· .		.		١.					
Fort Garry,	Man	3.74	3.74	3.78	3.85	3.82	3.76	3.61	3.46	3.21	2:76	2.56	2 37

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

Greenwich "

0 43 p.m.

4 25 p.m. 9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day)

Station.		136	h Janus	ary.	14t]	h Jan us	ary.	15t	h Janu	ary.	16tł	Janus	ary.
Glace Bay,	N.B.	c	0	6		٠		0		1 °	0	, ,	0
Sydney,		• 23	21	19	19	23	30	33	24	10	15	18	12
Guysborough,	"	19			10			28			10		•
Halifax,	"	19	22	16	16	27	37	20	21	20	14	13	9
Charlottetown,	,, PTET	17	16		11	20	29	20	19		10	9	5
Chatham,	N.B.	8	14	6	1	14	16	15	11	0	1	7	3
Bathurst,													
Father Point,	,, Q.	6	9	14	2	8	12	10	10	8	5	10	1
Quebec,		1	5	4	10	9	9	i 9	8	5	1 0	3	1
Montreal,	,,	_		Ì				-				ĺ	1
Cornwall,	"	•			•		! · 						
Ottawa,	Ont.	•		9	11	15	11	2			1]	
	"	8	8		13	14	8	l	4	0	5	5	1
Brockville,	,,	4	12	12			*	4	6	1	-8	8	_3
Kingston,	,,	9	9	13	18	13	4	10	4	4	-9	7	2
Peterborough,	,,	٠								.			
Toronto,	,,	15	25	25	12	20	14	10	10	4	7	14	5
Port Dover,	,,	15	22	20	15	16	8	8	9	8	3	17	11
Port Stanley,	,,	6	22	20	18	15	9	8	7	8	10	16	-1
Windsor,	,,	•											
Granton,	,,												
Stratford,	,,											•	
Goderich,	,,												
Kincardine,	,,	19	21	20	19	16	14	11	13	10	15	17	15
Saugeen,	,,	15	20	13	15	15	10	5	6	7	9	5	14
Stayner,	,,	11	16		9	14		7	10		11	8	
Little Current,	,,			.									
Fort Garry,	Man.	27	-20	26	29	15	13	-13	-5	. 0	. 5	12	18

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich " 7 25 a.m.

4 25 p.m.

10 50 p.m.

0 43 p.m. 9 43 p.m. 4 08 a.m. (of next day).

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	17th	Janu	ary.	18tl	Janu	ary.	19tl	Janu	ary.	20th	Janu	ary.	21st	Janus	ary.
Glace Bay, N.S														.	
Sydney, "	2.76	2.98	3.20	3.45	3.41	3.39	3.32	3.14	2.95	2.85	3.08	3.32	3.24	3.53	3.44
Guysborough ,,	2.85			3.47		١.	3.32			2.79		! •	3.56		
Halifax, ,,	2.88	3.18	3.36	3.21	3.51	3.49	3.33	3.11	2.86	2 · 82	3.23	3.44	3.62	3.56	3.38
Charl'town, PEI	2.83	3.14] .	3.48	3.40		3.25	3.00		3.05	3.35		3.63	3.21	3.34
Chatham, N.B	2.95	3.19	3.42	3.50	3.43	3.40	3.24	2.87	2.88	3.35	3.47	3.66	3.74	3.44	3.26
Bathurst, ,,														.	
Father Point, Q	3.10	3.29	3.38	3.22	3.13	3·1 9	2.87	2.89	3.14	3.47	3.61	3.69	3.52	3.53	3 11
Quebec, ,,	3.14	3.47	3.46	3.36	3.33	3.25	2.95	2.83	3.09	3.44	3.59	3.66	3.44	3.15	3 · 10
Montreal, ,,											•				
Cornwall, Ont															
Ottawa, ,,	3.42	3.42	3.37	3.36	3.24	3.07	2.77	2.97	3.30	3.59	3.55	3.57	3.24	3.10	3.10
Brockville, ,,	3.47	3.43	3.38	3.47	3.25	3.16	2.90	2.92	3.21	3.52	3.59	3.52	3.19	3.09	3.11
Kingston, ,,	3.49	3.45	3.41	3.40	3.27	3.19	2.92	2.96	3.29	3.55	3.28	3.20	3.19	3 11	3.11
Peterborough "															
Toronto, ,,	3.41	3.36	3.32	3.32	3.15	3.01	2.84	2.99	3.29	3.53	3.46	3.28	3.02	3.06	2.99
Port Dover, "	3.42	3.37	3.33	3.31	3.16	2.99	2.88	2.98	3.25	3.49	3.40	3.25	3.05	3.05	2.94
Port Stanley ,,	3.41	3.36	3.30	3.30	3.12	2.97	2.91	3.01	3.27	3.46	3.34	3.21	3.02	3.03	2.88
Windsor, ,,														.	
Granton, ,,				١.					ľ.				.		
Stratford, ,,				.										.	١.
Goderich, "				ļ.	.							.			
Kincardine, "										١.				.	١.
Saugeen, "	3.30	3.50	3.12	3.21	2.99	2.87	2.93	3.15	3.46	3.54	3.44	3.18	2.90	3.08	2.82
Stayne", ,,	3.37	3.28					2.84	3.24		3.56	3.47		2.97	3.03	
Little Current,	.	.			.].			
Fort Garry, Man	2.12	2.37	2.70	3.06	3.23	3.41	3.45	3.23	3.10	3.00	2.82	2.76	2.74	2.89	3.03

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m.

10 50 p.m. 4 08 a.m. (of next day.) Greenwich " 0 43 p.m. 9 43 p.m.

S	70.1			100	 =		1041	,		0041	T		61 -A	Janua	
Stations.	17th	Janus	ry.	18tn	Janua	ıry.	ıstn	Janua	ry.	20th	Janua	iry.	2186	Janua	ry.
Glace Bay N.S.		°		.	°		0	°	°	.	°	•	°	•	•
Sydney, "	9	13	17	10	25	27	30	35	35	28	16	16	14	11	14
Guysborough, ,,	1			10	. }		28		. !	30			8	.	•
Halifax, ,,	7	14	14	15	31	31	33	40	41	1 25	13	10	8	18	27
Charl'town, PEI	1	14		11	30		25	37		17	10		8	14	22
Chatham, N.B.	0	15	1	3	28	26	27	40	34	12	12	3	7	14	18
Bathurst, ,,				.		. !				.			. 1	. [
Father Point, Q.	2	8	5	12	27	25	27	29	19	3	6	6	13	16	16
Quebec, Q.	-5	2	3	9	21	18	20	31	19	-1	10	1	0	17	20
Montreal, Q.							.							. [
Cornwall, Ont.										.			.		
Ottawa, "	8	14	14	14	27	17	24	32	12	-2	11	2	8	19	23
Brockville, "	12	16	19	20	31	30	35	33	17	3	11	6	14	33	34
Kingston, "	2	23	22	26	31	30	35	34	19	3	13	! ! 8	25	31	35
Peterborough, "															
Toronto, ,,	11	25	24	19	34	34	36	36	19	7	20	26	33	37	38
Port Dover, "	16	25	25	27	34	35	34	34	27	10	22	20	33	36	41
Port Stanley, "	18	25	26	27	33	34	34	35	25	11	22	24	34	36	40
Windsor, ,,								} :	 •					,	
Granton, "	•	١.													
Stratford, "		.							! .			.			
Goderich, "															
Kincardine, ,,	15	24	24	30	35	36	34	23	15	8	19	24	36	36	39
Saugeen, ,,	14	22	22	24	33	34	34	20	13	3	20	21	34	37	32
Stayner, "	9	22					36	21		- 4	12		; 32	36	
Little Current,,								١.			:				
Fort Garry Man.	19	13	4	6	-11	22	29	-4	-5	3	10	19	-7	6	-20

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

foronto civil time

7 25 a.m.

4 25 p. m.

10 50 p. m.

Greenwich ,,

0 43 p.m.

9 43 p. m.

4 08 a. m. (of next day).

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	22nd	Jan	ary.	23rd	l Janu	ary.	24tl	ı Janu	ary.	25tl	Janu	ary.	26tł	Janu	ary.
Glace Bay, N. S.			 •			.									
Sydney, ,,	3 34	3.21	3.02	2.86	2.71	2.58	2.86	3.14	3.21	3.16	2.87	2.72	2.75	2.87	2.97
Guysborongh, ,,	3.28			2.84			2.93		١.	3.08	! . •	.	2.87		
Halifax, ,,	3.24	3.08	3.00	2.83	2.69	2.63	3.03	3.19	3.19	3.06	2.79	2.88	3.12	3.09	3.19
Charl'town, PEI	3.26	3.07		2.71	2.58	2.52	2.96	3.19		3.13	2.94		3.01	3.03	3.12
Chatham, N.B.	3.32	3.03	2.88	2.74	2.47	2.49	3.04	3.19	3.23	3.22	3.21	3.31	3.29	2.10	3.21
Bathurst, ,,															
Father Point, Q.	3.12	3.18	2-72	2.58	2.33	2.46	3.13	3 22	3.25	3.27	3.31	3.35	3.42	3.32	3.29
Quebec, ,,	3.01	2.74	2.64	2.51	2.43	2.77	3.27	3.24	3.05	3.22	3.29	3.45	3.54	3.43	3.41
Montreal, ,,								.							
Cornwall, Ont.															
Ottawa, ,,	2.82	2.69	2.59	2.57	2.87	3 26	3.25	3.10	3.39	3.42	3.57	3.67	3·7 3	3.43	3.38
Brockville, ,,	2.84	2.70	2.56	2.61	2.86	3.25	3.24	3.07	3.39	3.44	3.57	3.69	3.64	3.39	3.21
Kingston, ,,	2.86	2.74	2.65	2.66	2.93	3.35	3.29	3.11	3.41	3.20	3.62	3.73	3.70	3.39	3.18
Peterborough ,,			ļ .							.		١.			
Toronto, ,,	2.80	2.60	2.61	2.60	3.16	3.32	3.24	3.27	3.54	3.55	3.64	3.70	3.57	3.12	3.03
Port Dover, "	2.83	2 61	2.63	2.64	3.25	3.37	3.24	3.40	3.57	3.59	3.70	3.71	3.28	3.12	3.06
Port Stanley, ,,	2.82	2.62	2.71	2.81	3.27	3.36	3.25	3.46	3.60	3.66	3.71	3.75	3.55	3.12	3.09
Windsor, ,,				.						.					
Granton, ,,															
Stratford, ,,											.				
Goderich, "											<u> </u>			} .	
Kincardine, "	١.		,												! .
Saugeen, "	2.72	2.75	2.69	2.68	3.17	3.33	3.16	3.46	3.49	3.54	3.64	3.65	3.58	3.14	2.90
Stayner, ,,	2.70	2.66		2.62	3.23		3.18	3.44					3.56	3.12	
Little Current ,,	١.				•										.
Fort Garry, Man.	3.08	3.10	3.16	3.32	3.41	3.48	3.62	3.78	3.84	3.68	3:34	3.14	2.93	2.85	2.92

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich "

7 25 a. m. 0 43 p. m. 4 25 p. m. 9 43 p. m.

10 50 p.m. 4 08 a.m. (of next day).

		Fig. 15 mars and annual	de national i di	e nea-10 Tours		2 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -						S-21 - (D)		1.11 25 4	1 5 1 10
Stations.	22n	d Jan	uary.	23r	l Janı	ıary.	24t	h Ja nı	uary.	25tl	ı Janu	ıary.	26t.	h Jan	iary.
Glace Bay, N.S.		l °	°.	· ·		°	0	0	ı °	0		, °	°	l °	0
Sydney, "	29	34	36	38	42	45	33	23	17	17	20	2)	7	-10	-10
Guysborough, "	25			36		1	34			1 15	-		0		
Halifax,	34	36	37	43	44	43	30	26	20	18	24	14	_3	-13	-14
Charl'town, PEI.		36		37	41	41	28	21		17	16		9	-15	_17
Chatham, N.B.	Į.	28	36	39	43	41	16	15	1 10	9	5	-4	-1 6	-19	-19
Bathurst, ,,		-								.					-
Father Point, Q.	23	27	31	27	27	23	9	12	5	14	8	3	-23	_15	_19
Quebec.	35	32	31	32	31	22	5	14	14	_4	-4	15	-25	_20	-24
Montreal, ,,														-	-
Cornwall, Ont.	.			i i			'			'	'] •
Ottawa.	31	31	37	34	30	18	20	21	7	_7	_3	10	-20	-6	-8
Brockville.	34	44	45	38	35	24	25	28	9	6	2	- 9	-18	-3	-3
Kingston	41	42	45	35	32	24	28	26	11	-4	8	-7	-10		1
Peterborough		*-		33		**	46			1	_		10	_0	-
*oronto.	40	44	36	36	· 28	24	26	23	14	13	11	12	30	21	21
Port Dover	40	43	35	38	27	25	29	18	12	11	13	11	13	30	33
Port Stanley	40	44	36	33	26	26	28	17	11	10	13	3			30
" Indsor	40	44	30	33	20	20	28	1.7	111	10	19		16	31	30
Granton	•							•				•	•	•	•
Stratford	•	•	•	•	•	'		•	•	•	•	•	•	•	'
$G_{ m oderich}$	•	•	•	•					.	•	•	•	•	•	1
Kincardine, ,,					•						,	1.5		•	
Sangeen,	36	35	33	29	25	26	25	24	14	13	13	15	13	29	33
Stayner,	39	34	31	28	24	26	24	15	13	12	10	6	10	24	28
Little Current ,,	45	35		31	24		24	13	•	•	•	•	7	19	
Fort Garry, Man.	•		. 	•	٠		•			•	٠.	٠	٠		
Jarry, Man,	-24	10	-26	2 9	-17	-28	34	21	32	30	-3	2	-3	5	2

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. 4 25 p.m. 10 50 p.m. Greenwich , 0 43 p.m. 9 43 p.m. 4 08 a.m. (of next day.)

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	27th	Janus	ıry.	28th	Janua	ry.	29th	Janu	ary.	30t]	n Jan	ary.	31st	Janu	ary
Glace Bay, N. S.															
Sydney, "	3·18	3.36	3.38	3.21	2.83	2.56	2.62	2.92	2.99	2.99	3.08	3.37	3.55	3.20	3.34
Guysborough "	3.23			3.01			2.70			2.94			2.56		.
Halifax, "	3.30	3.31	3.18	2.93	2.71	2.46	2.73	2.96	3.02	2.74	3·25	3.49	3.57	3.40	3.3
Charl'town, PEI.	3.28	3.33	3.26	2.98	2.67		2.78	2.98		2.96	3.30	3.49	3.59	3.20	
Chatham, N.B.	3.38	3.28	3.26	3.14	2.71	2.48	2.85	2.99	3.07	3.23	3.39	3.62	3.69	3.41	3.3
Bathurst, ,,														.	.
Father Point, Q.	3.27	3.12	3.16	2.99	2.76	2.77	2.95	3.07	3.08	3.30	3.47	3.23	3.44	3.30	3.3
Quebec, ,,	3.22	3.07	2.99	2.74	2.70	2.78	3.00	2.99	3.03	3.42	3.58	3.28	3.21	3.35	3.4
Montreal, ,,] .									1 .		
Cornwall, Ont.					.		•								.
Ottawa, ,,	3.03	2.91	2.87	2.69	2.81	3.07	3.21	3.02	3.26	3.62	3.66	3.28	3.42	3.45	3.6
Brockville, "	3.01	2.87	2.77	2.64	2.81	3.11	3.24	2.98	3.24	3.61	3.61	3.23	3.41	3.48	3.5
Kingston, ,,	3.01	2.90	2.77	2.66	2.87	3.14	3.25	2.99	3.28	3.64	3.63	3.61	3.44	3 52	3.6
Peterborough ,,															1.
Toronto, ,,	2.90	2.74	2.69	2.57	2.99	3.20	3.15	2.99	3.35	3.60	3.20	3.40	3.41	3.50	3.5
Port Dover, ,,	2.94	2.73	2.65	2.60	3.01	3.23	3.21	3.06	3.29	3.52	3.39	3.26	3.39	3.21	3.5
Port Stanley, ,,	2.96	2.72	2.68	2.66	3.06	3.25	3.23	3.10	3.30	3.21	3 33	3.30	3.43	3 52	3.2
Windsor, ,,
Granton, ,,				.										.	.
Stratford, ,,].	.			.										.
Goderich, "		1.						
Kincardine, "					1.				
Saugeen, "	2.79	2.63	2.58	2.75	3.05	3.19	3.06	3.10	3.39	3.63	3 51	3.43	3.43	3.56	3.6
Stayner, ,,	2.81	2.76	.	2.73	3.13		3.05	3.20		3.63	3 49	.	3.47	3 49	
Little Current ,,				
Fort Garry, Man	. 3.02	3.17	3.20	3.22	3.36	3.37	3.63	3.79	3.84	3.77	3 66	2:62	13:64	3.64	3.0

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

4 08 a.m. (of nextday.)

Stations.	27tl	Janu	ary.	28th	Janu	ary.	29th	Janu	ary.	30tl	Janu	ary.	31st	Janu	ary.
Glace Bay, N.S.	,	.	•	.	°	0	:	°			٩	•	. 4	- 1	0
Sydney,	5	4	5	15	36	44	29	15	12	17	10	0	0	5	7
Guysborough, ,,	19	.		18			26			15			-8		
Halifax, ,,	- 8	9	25	36	39	41	26	21	20	25	6	2	5	11	13
Charl'town, PEI.	15	3	8	27	35		15	16		10	2	-5	9	2	
Chatham N. B.		0	1	8	12	15	4	12	7	1	-4	-14	—33	-1	-2
Bathurst, ,,															
Father Point, Q.	23	-10	2	3	10	10	6	8	12	3	11	11	4	3	1
Quebec, ,,	-14	4	1	5	11	10	0	1	-1	-14	10	15	-15	-3	6
Montreal, ,,															
Cornwall, Ont.															
Ottawa, ,,	-8	2	6	10	21	10	2	.5	-1	-14	12	- 15	-10	1	11
Brockville, "	0	6	6	9	20	10	4	11	1	—18	8	-8	8	0	- 16
Kingston, "	7	15	10	10	21	10	7	13	2	12	— 7	_7	 7	4	10 ¹
Peterborough "		. :													
Toronto, "	33	32	34	35	25	22	26	31	8	0	2	1	1	12	1300
Port Dover, "	36	33	35	37	28	24	2 6	32	20	8	9	9	5	17	4
Port Stanley, "	32	34	35	35	26	25	25	32	22	12	10	11	5	14	10
Windsor, ,,										į .					
Granton, ,,															
Stratford, ,,	.	.													
G _{oderich} , ,,													١.		
Kincardine, ,,	33	36	34	28	25	24	24	24	12	1	18	5	8.	15	16
Saugeen, ,,	35	35	33	25	21	20	25	18	8	-4	4	4	5	13	9
Stayner, ,,	36	35		22	19		26	14		_ 5	-1		- 1	14	
Little Current ,,															
Fort Garry, Man.	_1	-1	-2	-5	_3	-5	16	-18	-30	-25	-13	-21	27	-5	-11
	<u> </u>	1	<u> </u>	<u> </u>		<u></u>		<u> </u>	<u> </u>		1	<u>' </u>	1	<u>. </u>	<u> </u>

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich ,,

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day).

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	1st	Febru	ary.	2nd	Febru	ary.	3rd	Febru	ary.	4th I	ebrus	ıry.	5th 1	ebrus	ry.
Glace Bay, N. S.												•			•
Sydney, "	3.17	3·2 9	3.42	3.23	3.63	3·6 8	3.64	3.43	3.14	2.31	2.03	2.40	2.59	2.67	2.69
Guysborough "	3.50			3.60			3.61			2·1 0			2.65		
Halifax, .,	3.28	3.44	3.22	3.67	3.40	3 7 3	3.56	3.50	2.58	2.03	2.51	2.70	2.80	2.86	2.94
Charl'town, PEI.	3.33	3·4 8		3.71	3.73		3.61	3.29	2.89	2.30	2.54		2.77	2 87	
Chatham, N.B.	3.23	3.63	3.76	3.89	3.71	3·7 3	3.66	3.27	3.01	2.78	2.70	2.81	2.92	2.92	2.98
Bathurst, ,,															
Father Point, Q.	3.26	3.67	3.76	3.87	3.76	3.72	3.43	3.13	3.06	2.94	2.91	2.94	3.17	3.13	3.18
Quebec, ,,	3.60	3.65	3.77	3.85	3.69	3.21	3.37	3.10	2.94	2.97	3.03	3.15	3.25	3.21	3.52
Montreal, ,,	3.74	3.80	3.86	3.86	3.64	3.47	3.55	3.00	2.98	3.06	3.14	3.26	3.41	3.41	3.49
Cornwall, Ont.				.										.	
Ottawa, "	3.76	3.79	3.83	3.79	3.24	3.42	3.17	3.07	3.03	3.17	3.21	3.28	3.25	3.46	3.28
Brockville, ,,	3.73	3.76	3.87	3.71	3.52	3.39	3.15	3.01	3.02	3.15	3.22	3·28	3.60	3.47	3.20
Kingston, ,,	3.76	3.77	3.80	3.71	3.25	3.35	3.16	2.98	3.03	3.19	3.24	3.3 3	3.20	3.49	3.22
Peterborough ,,	.										•				
Toronto, "	3.70	3.72	3.68	3.21	3.23	3.14	3.05	3.02	3.12	3.56	3.29	3.38	3.55	3.57	3.28
Port Dover, ,,	3.61	3.64	3.62	3.37	3.16	3.07	3.07	3.06	3.12	3.27	3.28	3.40	3.55	3.54	3.24
Port Stanley ,,	3.62	3.66	3.57	3.39	3.14	3.11	3.12	3.09	3.19	3.29	3.31	3.42	3.57	3.26	3.25
Windsor, ,,	.														
Granton, ,,	٠							•			. •	٠	·•		
Stratford, "	.			٠											
Goderich, "								٠							
Kincardine, "	.								$ \cdot $						
Saugeen, "	3.67	3.72	3.70	3.41	3.17	3.12	3.11	3.10	3.15	3.52	3.41	3.40	3.60	3.63	3.49
Stayner, "	.	•		3.26	3.24		3.11	3.08		3.24	3.33		3.56	3.26	
Little Current ,,	.				.		,								
Fort Garry, Man.	3.43	3.27	3.15	3.04	3.15	3.22	3.34	3.40	3.44	3.47	3.20	3.21	3.41	3.38	3.50

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich "

7 25 a.m.

0 43 p.m.

4 25 p.m. 9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day).

Stations.	1st	Febru	ary.	2nd	Febru	ary.	3rd	Febru	ary.	4th	Febru	ary.	5th	Febru	ary.
Glace Bay, N.S.	•	°			۰		0	•	Q	0		•		9	9
ydney, ,.	9	1	-7	-3	3	-5	1	15	19	29	28	19	12	1	-1
Suysborough ,,	7			-8			_7			27			10		١.
Halifax, ,,	9	2		-11	3	-10	3	29	28	29	22	21	13	9	0
Charl'town, PEI.	4	-2	-5	-7	-1		-1	15	21	27	17		8	3	
Chatham, N.B.	-12	-4	-12	- 23	-1	-18	22	9	14	15	22	12	0	3	-5
Bathurst, ,,] .
ather Point, Q	-9	4	-9	-12	6	-14	14	7	5	8	10	13	-10	-2	-5
daebec, ,,	-14	-4	-12	- 20	-1	-1	5	13	. 4	11	16	1	-14	-1	-1
Montreal, ,,	0	-5	-10	-16	-5	-2	5	14	16	17	18	6	-5	4	0
Cornwall, Ont.													. !		
ttawa, "	15	0	-15	- 21	-1	1	7	17	15	12	18	3	-9	8	-1
Brockville, "	- 25	0	-12	-14	-2	-1	7	16	15	12	20	13	-8	5	-7
Cingston, ,,	-10	0	-10	_9	2	2	11	14	14	12	19	13	-3	8	1
eterborough ,,							. 1								ĺ.
oronto, ,,	4	7	5	5	22	26	18	22	20	17	23	13	2	20	8
ort Dover, ,,	11	12	5	8	17	28	20	22	20	19	26	22	11	24	13
ertStanley, ,,	11	16	9	12	19	20	17	22	20	19	27	22	10	24	9
Vindsor, ,,															١.
ranton, ,,															
tratford, ,,							. 1								
oderich, ,,							.		.						
Cincardine, ,,	9	11	5	10	15	15	20	20	24	27	25	23	18	19	18
augeen, ,,	11	14	3	2	13	12	15	18	19	19	21	14	5	18	14
tayner,				_3	9		18	20		19	21		11	10	
ittleCurrent, ,,										.					
ort Garry, Man.	9	16	15	12	9	7	3	0	1	2	7	-7	9	14	111

Table I.—Barometer at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich ,,

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	6th	Febr	uary.	7th	Febr	uary.	8th	Febr	uary.	9th	Febr	uary.	10th	Febr	ıary.
Glace Bay, N. S.						.							,		
Sydney, ,,	2.72	2.69	2.70	2.74	2.70	2.65	2.63	2.63	2.63	2.75	2.84	2.88	2.81	2.55	2.23
Guysborough, "	2.78			2.75			2.67			2.82		1.	2.77		١.
Halifax, "	2.94	2.83	2.84	2.84	2.72	2.76	2.81	2.79	2.85	2.94	2.97	2.93	2.77	2.38	2.06
Charl'town, PEI.	2.87	2.79	2.83	2.82	2.77		2.76	2.78		2.90	2.95	2.93	2.81	2.55	2.30
Chatham, N. B.	3.06	2.84	2.91	2.92	2.75	2.81	2.85	2.93	2.97	3.06	2.95	2.92	2.88	2.62	2.46
Bathurst, ,,								١.) •	
Father Point, Q.	3·19	3.12	3.10	3.01	3.00	2.92	3.03	3.04	3.12	3.11	3.01	3.01	2.81	2.67	2.54
Quebec, ,,	3.37	3.22	3.20	3.10	2.99	3.04	3.14	3.50	3.20	3.23	3.04	2.86	2.82	2.64	2.61
Montreal, ,,	3.51	3.32	3.24	3.19	3.12	3.23	3.39	3.34	3.32	3.21	3.00	2.94	2.88	2.76	2.76
Cornwall, Ont.] .													
Ottawa, ,,	3.52	3.34	3.24	3.12	3.17	3.30	3.43	3.39	3.34	3.18	2.99	2.95	2.90	2.88	2.82
Brockville, ,,	3.55	3.30	3.22	3.11	3.16	3.27	3.48	3.40	3.36	3.21	3.00	2.96	2.94	2.83	2 81
Kingston, ,,	3.52	3.31	3.50	3.09	3.16	3.31	3.53	3.45	3.40	3.21	3.05	3.01	3.00	2.89	2.88
Peterborough, ,,															١.
Toronto, ,,	3.45	3.17	3.00	2.99	3.12	3.33	3.47	3.39	3.28	3.12	3.00	3.04	3.04	2.84	2.91
Port Dover, "	3.43	3.11	2.96	2.92	3.14	3.35	3.48	3.39	3.30	3.16	3.04	3.11	3.13	2.84	2.92
Port Stanley, ,,	3·4 2	3.09	2.95	2.96	3.15	3.33	3.44	3.36	3.29	3.17	3.08	3.16	3.17	2.87	2.96
Windsor, ,,															
Granton, ,,															
Stratford, ,,														.	
Goderich, ,,	•														
Kincardine, ,,] .] .		j .					
Saugeen, ,,	3.39	3.14	3.01	3.02	3.20	3.35	3.48	3.38	3.26	3.10	3.10	3.11	3.01	2.86	2.92
Stayner, ,,	3 41	3.16		3 05	3.25					3.07	3.02		3.00	2.86	
Little Current ,,															
Fort Garry, Man.	3.03	2.95	2.91	2.77	2.72	2.84	3.12	3.26	3.32	3.33	3.07	3.05	3.21	3.18	3.02

Table II .- Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich "

7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

Stations.	6th	Febru	ary.	7th	Febru	ary.	8th	Febru	ary.	9th 1	Februa	ary.	10th	Februs	ury.
Glace Bay, N.S.	0	0	Ů	°		•	°	.	•	° I	<u>.</u>	°	°		Q
Sydney, "	_6	- 8	_7	_2	2	0	6	9	15	20	22	16	7	21	24
Guysborough "	_10			_10	. 1		-2	.		12	.		8	.	
Halifax, "	_3	4	0	-4	7	8	_3 _3	17	12	14	27	16	15	30	22
Charl'town, PEI.	•	-3	_6	8	-3		0	13		14	23	12	14	21	20
Chatham, N.B.			-8	15	5	-4	_8	17	16	15	29	11	9	23	22
Bathurst, ,,	1	1.								.			۱. ا	.	
Father Point, Q.	•	_5	7	_10	7	11	-4	12	15	16	19	15	13	20	18
Quebec, ,,	١	1	6	-12	7	1	-2	15	7	4	7	14	15	23	15
Montreal, ,,	١.	4	2	_3	4	9	6	17	• ₁₅	9	18	17	14	24	16
Cornwall, Ont.	١.	1.		١.	١.									. !	
Ottawa, ,,		5	4	4	10	0	_7	20	 6	4	23	13	15	19	13
Brockville, ,,	١	6	5	5	8	5	_9	17	2	-3	24	19	20	22	17
Kingston, "	i	7	7	3	10	4	-3	20	9	5	27	20	14	22	13
Peterborough "			.						j .						
Toronto, ,,	1	20	11	13	20	14	8	23	111	14	27	19	20	23	9
Port Dover, "		į	14	15	20	13	0	27	8	6	28	22	15	22	21
Port Stanley, "	18	17	15	10	23	18	18	28	29	11	28	22	5	19	24
Windsor, ,,,	1		-				-								
Granton, ,,	1														
Stratford, i,,	1			.											
Goderich, "	1		:				[
Kincardine, ,,	١.,			12	21	13	12	20	21	23	26	21	18	25	25
Saugeen, ,,			1	13	23	8	7	23	20	20	24	21	21	22	17
Stayner,		_	}	13	18			-	."	23	25		21	15	-
LittleCurrent ,,		, <u> </u>	•					ļ				ļ	-		.
Fort Garry, Man	. 1		7	11	22	16	10	10	7	-8	15	12	_6		

TABLE I.—Barometer at 32° Faht, and reduced to Sea level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m. 9 43 p.m.

10 50 p.m.

Greenwich ,,

0 43 p.m.

4 25 a.m. (of next day).

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	11tl	Febr	uary.	12th	Febr	uary.	13tl	Febr	uary.	14th	Febr	uary.	15tl	ı Febr	uary
Glace Bay, N.S.		.										.			
Sydney, "	1.78	1.84	2.13	2.46	2.84	3.12	3.39	3.42	3.33	3.09	2.79	2.86	3.29	3.42	3.38
Guysborough, ,,	1.79		.	2.56			3.40			3.00		1.	3.33		
Halifax, "	1.95	2.25	2.42	2.72	2.99	3.24	3.44	3.37	3.21	2.93	2.79	3.02	3.35	3.34	3.18
Charlo'town, PEI	2.05	2.16		2.64	2.99	3.22	3.41	3.28		2.80	2.69		3.37	3.38	
Chatham, N.B.	2.33	2.29	2.45	2.77	2.99	3.29	3 42	3.12	2.88	2 60	2.66	3.06	3.36	3.38	3.31
Bathurst, ,,] .								•
Father Point, Q.	2.53	2.46	2.60	2.90	3.09	3.22	3.10	3.02	2.57	$2^{\cdot}31$	2.71	3.08	3.25	3.19	3.11
Quebec, ,.	2 62	2.67	2.77	3.07	3.19	3.19	3.01	2.72	2.53	2.38	2.91	3.19	3.26	3.12	2.92
Montreal, ,,	2.79	2.79	2.95	3.17	3.13	3.04	2.82	2.61	2.57	2.75	3.14	3.22	3.24	3.01	2.82
Cornwall, Ont.					·							.			
Ottawa, "	2.84	2.85	3.02	3.18	3 04	2.95	2.71	2.54	2.57	2.86	3.16	3.23	3.21	2.95	2.77
Brockville, "	2.86	2.85	2.98	3.18	2.99	2.96	2.72	2.60	2.59	2.96	3.18	3.23	3.19	2.90	2.80
Kingston, ,,	2.78	2.89	3.03	3.18	3.00	29.0	2.71	2.63	2.59	3.09	3.25	3.28	3 · 22	2.95	2.79
Peterborough, ,,													١.		
Toronto, "	2.92	2.92	3.03	2.95	2.75	2.66	2.50	2.55	2.67	3.12	3.19	3.21	3.06	2.72	2.59
Port Dover, ,	2.96	2.93	3.00	2.90	2.70	2.63	2.49	2.65	2.73	3.50	3.23	3.23	3.00	2.73	2.60
Port Stanley ,	3.00	3.01	3.00	2.88	2.68	2.59	2.48	2.59	2.80	3.22	3.24	3.22	2 99	2.71	2.60
Windsor, ,,															
Granton, ,,															
Stratford, ,,											:				
Goderich, ,,								,							.
Kincardine, "	•								.						
Baugeen, "	2 99	3.02	3.05	2.85	2.61	2.50	2940	2.70	2.82	3.21	3.22	3.20	2.96	2.68	2.63
Stayner, ,,	2.93	2 · 95	٠.	2.90	2.70		2.39	2.37		3'14	3·18				
LittleCurrent, ,,															
Fort Garry, Man.	2.72	2.42	2.29	2.40	2.47	2.57	2.78	2.90	2.97	3.14	3.03	2.91	2.76	2.68	2.78

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich "

7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m. 10 50 p.m.

4 08 a.m. (of next day.)

Stations,	11th	Febru	ary.	12th	Febru	ary.	13th	Febru	ary.	14th	Febru	ary.	15th	Febru	ary.
Glace Bay, N.S.	•	0	•	0	:	•	° I	*		.			.		0
Sydney, ,,	27	24	21	19	18	13	15	21	25	39	44	38	24	25	23
Guysborough, ,,	23	.		14			6	.		36			23		
Halifax, "	22	24	20	14	22	11	7	30	37	44	40	33	26	27	27
Charl'town,PEI.	22	21		14	14	8	5	26	,	40	40		22	26	
Chatham, N.B.	22	21	17	11	18	1	-3	35	43	47	41	26	20	30	23
Bathurst, ,,						,								.	
Father Point, Q.	17	20	14	5	9	6	10	14	20	41	28	20	17	24	29
Quebec, ,,	5	11	8	4	8	6	18	29	37	36	25	23	19	30	29
Montreal, ,,	10	16	10	2	9	8	36	41	40	34	26	25	23	35	34
Cornwall, Ont.				. '									.		
Ottawa, ,,	8	11	5	-11	13	12	23	40	37	27	27	22	14	35	33
Brockville, ,,	8	19	12] 12	15	10	42	42	40	26	27	25	23	38	36
Kingston, ,,	10	19	6	0	18	27	39	39	37	23	29	25	22	35	34
Peterborough "															
Toronto, ,,	19	23	9	23	31	37	38	41	35	23	31	25	25	39	37
Port Dover, "	21	26	11	18	41	39	40	43	33	20	27	23	28	38	38
Port Stanley, ,,	20	28	14	24	38	39	40	35	30	17	29	21	27	37	36
Windsor, ,,				 -			. '								١.
Granton, ,,									,						
Stratford, "			١.				! .								١.
Goderich, "													.		١.
Kincardine, "	25	23	13	24	41	43	40	32	28	23	31	27	32	38	38
Sangeen, ,,	23	16	9	19	36	40	43	30	26	21	30	28	30	39	3,
Stayner, "	15	11		13	28		43	33		24	32				
Little Current ,,												١.			
Fort Garry, Man.	9	22	9	3	9	-1	_10	_2	_8	-26	-3	-5	-8	7	{

Table I.—Barometer at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m. 10 50 p.m.

Greenwich ,, 0 43 p.m. 9 43 p.m.

4 08 a.m. (of next day.)

Stations.	16th	Febr	агу.	17th	Febr	uary.	18th	Febru	ary.	19th	Febr	uary.	20th	Febr	uary.
Glace Bay N.S.															
Sydney, ,,	3.01	2.55	2:30	2 · 30	2.24	2.34	2.59	2.93	3.22	3.42	3.41	3.33	3.14	2.81	2.91
Guysborough "	2.89			2.28			2.67			3.43			3.07		
Halifax, ,,	2.75	2.38	2.35	2.33	2.36	2.48	2.81	3.09	3.29	3.47	3.41	3.25	3.07	2.81	3.00
Charl'town, PEI	2.87	2.44	2.30	2.24	2.27	2.42	2.74	3.11		3.44	3.33		2.98	2.75	2.99
Chatham, N.B.	2.94	2.49	2.34	2 · 27	2.31	2.57	2.82	3.12	3 · 37	3.47	3.53	3.08	2.96	2.77	3.05
Bathurst, ,,	١.														
Father Point, Q.	2.79	2.65	2.28	2.24	2.43	2.64	3.13	3.28	3.35	3.28	2.95	2.81	2.70	2.73	3.14
Quebec, ,,	2.67	2.30	2.34	2.55	2:69	2 94	3.18	3.59	3.38	3.29	2.99	2.90	2.78	2.91	3.11
Montreal, ,,	2.55	2.42	2.50	2.86	3.06	3.21	3.39	3.41	3.40	3.26	2.95	2.89		2.98	3.16
Cornwall, Ont								١.							
Ottawa, "	2.49	2.55	2.76	3.05	3.21	3.33	3.40	3.38	3.38	3.12	2.86	2.87	2.79	3.03	3.19
Brockville, "	2.52	2.57	2.67	3 07	3.21	3.29	3.41	3.37	3.39	3.14	2.92	2.94	2.81	3.01	3.14
Kingston, "	2.52	2.65	2.81	3.14	3.25	3 35	3.45	3.42	3.38	3.18	2.97	2.97	2.88	3.07	3.19
Peterborough, ,,														ļ .	
Toronto, ,,	2.57	2.81	2.95	3.21	3 · 27	3.35	3:34	3.31	3.18	2.97	2.87	2.84	2.83	3.04	3.11
Port Dover, "	2.64	2.87	3.02	3.20	3.27	3.32	3.33	3.22	3.16	2.96	2.90	2.87	2.87	3.04	3.07
Port Stanley, ,,	2.67	2.91	3.08	3.23	3.28	$3 \cdot 32$	3 34	3 · 20	3.09	2 94	2.92	2.89	2.89	3.07	3.08
Windsor, "									١.	•			.		
Granton, ,,					į .										
Stratford, ,,												-			
Goderich, ",										j .					
Kincardine, "			!	
Saugeen, ,,	2 68	2.89	3.08	3.33	3.37	3.38	3.45	3.29	3.10	2.88	2.89	2.86	2.96	3.16	3.21
Stayler, "	2.55	2.81		3.26	3.31		3.38	3.25		2.86	2.81		2.89	3.10	
Little Current ,,											۱.				.
Fort Garry, Man.	3.10	3.19	3.18	2.91	2.68	2.61	2.50	2.51	2.57	3.01	3.10	2.89	2.72	3.07	3.41

Table II .- Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich "

4 25 p.m.

10 50 p.m. 4 08 a.m. (of next day.) 9 43 p.m. 0 43 p.m.

Stations.	16th	Febr	310 PU	17+h	Febr	110777	18+h	Febr	110 957	10+1	h Febi	7110 PV7	20+1	n Fab	ruary.
Stations.	1000	1.601	uary.	1,011	roor	uary.	1001	Febr	uary,	150		mary.	200	4 Peb	ruary.
Glace Bay, N.S.			0	9								.	9	9	1 .
Sydney, "	27	32	32	33	31	26	19	20	19	22	26	24	33	40	36
Guysborough, ,,	26			31			15			15	.		30		
Halifax, "	30	34	33	34	31	23	16	23	18	14	20	29	35	40	37
Charl'town, PEI	25	33	31	31	27	19	16	21		14	28	١.	34	39	32
Chatham, N.B.	24	26	25	25	22	15	12	23	11	-2	31	30	35	34	31
Bathurst, ,,							! ! •					1 -			
Father Point, Q.	23	24	26	21	25	21	8	17	10	8	32	27	34	32	16
Quebec, ,,	24	27	25	15	16	10	2	14	6	5	24	24	30	34	13
Montreal, ,,	30	35	27	12	14	8	8	15	7	1	27	32		38	25
Cornwall, Ont.						}				١.					1.
Ottawa,	30	34	20	9	13	9	-1	14	-1	5	18	29	33	31	18
Brockville, ,,	29	32	27	11	14	12	4	18	10	24	31	35	34	35	28
Ringston, ,,	31	29	24	13	20	11	8	22	11	26	34	35	36	36	27
Peterborough, ,,	. !				.					.			١.		1.
Toronto, ,,	34	29	24	16	19	12	11	23	26	32	38	34	34	37	30
Port Dover, "	34	27	25	20	22	14	15	30	22	32	36	34	36	34	34
Port Stanley, ,,	33	27	24	21	22	14	14	30	27	31	34	33	35	35	34
Windsor, ,,			.	. 1		. !	.	.			١.		١.		1.
Granton, ,,	. [.	.	.	.]	.							
Stratford, ,,	.			. !	.	.		.							
Goderich, "			.	.		.	l			.					
Kincardine, ,,	30	25	23	17	20	15	10	29	22	30	36	35	29	25	25
Saugeen, ,,	28	24	20	5	18	11	4	23	18	28	36	34	27	23	19
Stayner,	31	25		15	16		0	17	.	28	38		31	24	
Little Current ,,	.				!	. }									1,
Fort Garry, Man.	-15	8	-3	8	26	23	25	29	15	15	12	_9	-3		16

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

10 50 p.m.

Greenwich "

0 43 p.m.

4 25 p.m. 9 43 p.m.

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.		21st	Februa	ary.	22nd	Febru	ary.	23rd	Febru	ary:	24th	Febru	ary.
Glace Bay,	N.S.									•			
Bydney,	.,	3.27	3.34	3.26	3.17	3.28	3.37	3.35	2.94	2.57	2.63	3.09	3.26
Guysborough,	,,	3.27	.	.	3.14		.	3.30	.		2.69		
Halifax, !	,,	3.29	3.29	3.19	3.16	3.28	3.33	3.26	2.73	2.61	2.80	3.18	3.35
Charlottetown, I	P. E.1 ,	3.33	3.31	3.21	3.18	3.36		3.35	2.79	2.58	2.78	3.17	
Chatham,	N.B.	3.43	3.29	3.21	3.34	3.45	3.21	3.41	2.78	2.56	2 94	3.19	3.39
Bathurst,	,,												
Father Point,	Q.	3.32	3.23	3.19	3.37	3.41	3.44	3.26	2.63	2.47	3.05	3.24	3.36
Quebec,	,,	3.20	3.18	3.17	3.36	3.38	3.28	3.05	2.56	7.54	3.25	3.39	3.45
Montreal,	,,	3.20	3.11	3.19	3.36	3.35	3.26	2.81	2.59	2.83	3.45	3.48	3.57
Cornwall,	Ont.										. ,		
Ottawa,	,,	3.15	3.10	3.20	3.40	3 31	3.27	2.71	2.66	2.98	3.48	3.57	3.55
Brockville,	,,	3.15	3.08	3·16	3.32	3.29	3.23	2.68	2.73	2.92	3.21	3.52	3.54
Kingston,	,,	3.16	3.09	3.21	3.34	3.28	3.18	2.77	2.78	3.10	3.59	3.59	3.59
Peterborough,	,,	:											
Toronto,	,,	3.04	3.09	3.20	3.27	3.22	3.07	2.64	2.90	3.20	3.24	3.52	3.52
Port Dover,	,,	3.01	3 05	3.16	3.19	3.13	3.03	2.67	3.00	3.26	3.29	3.53	3.53
Port Stanley,	,,	3.02	3.06	3.16	3.20	3.15	3.03	2.72	3.06	3.32	3.57	3.53	3.23
Windsor,	,,								<u>.</u>				
Granton,	,,												
Stratford,	,,					.		١.					
(Foderich,	31							.					
Kincardine,	,,	į .				ļ .	.			ļ .	.		
Saugeen,	21	3.16	3.18	3.33	3.36	3.29	3.16	2.71	2.98	3.35	3.65	3.55	3.59
Stayner,	,,	3.11	3.14					2.54	2.94		3.55	3.47	
Little Current,	,,		.										
Fort Garry,	Man.	3.21	3.46	3.46	3.44	3.42	3.48	3.57	3.57	3.60	3.59	3.51	3.47

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich 7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m. 10 50 p.m.

Stations.		21s	t Febr	iary.	22n	d Febr	uary.	23r	d Febri	iary.	24t	h Febr	nary.
Glace Bay,	N.S.	•	1 .	1 .	0	°	1 .	-	0	1 .			1 °
Sydney,	,,	31	27	28	29	26	19	19	21	25	31	13	111
Guysborough,	,,	32			30			21			28		
Halifax,	,,	34	32	33	34	31	26	22	30	32	34	22	15
Charlottetown,		24	27	31	33	20	İ .	16	19	28	25	17	}
Chatham,	N.B.	10	21	23	24	23	15	15	16	15	14	15	_1
Bathurst,	. ,,												
Father Point,	Q.	5	15	16	17	18	13	13	14	15	9	9	8
Quebec,	,,	12	20	20	21	22	19	16	20	30	2	7	2
Montreal,	,,	14	20	23	20	25	22	20	38	29	7	13	6
Cornwall,	Ont.		<u> </u>	١.] .								
Ottawa,	,,	20	27	24	12	30	25	24	36	23	1	12	_3
Brockville,	,,	27	24	24	17	25	24	29	37	32	9	17	15
Kingston,	,,	27	27	26	22	26	24	31	37	28	12	19	20
Peterborough,	"		١.		.	١.	. ·						
Terente,	,,	30	32	30	28	31	29	31	33	25	17	26	25
Port Dover,	,,	32	33	32	30	28	27	31	31	25	18	25	21
Port Stanley,	,,	3 3	34	33	32	32	29	32	29	24	18	27	22
Windsor,	,,				} .							.	
Granton,	,,	•		} .							.		
Stratford,	,,			} .				}				:	'
Goderich,	,,] .				[i .					'
Kincardine,	,,	28	30	23	28	34	31	33	31	20	18	23	25
Saugeen,	,,	21	30	25	25	31	29	30	28	19	8	20	16
Stayner,	,,	26	27					37	28	l .	13	19	10
Little Current,	,,			} 1 •		!							
Foit Garry,	Man.	30	7	-13	16	-1	2	_24	-11	-22	-32	-5	-17

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 ρ.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.		25 t h	Febru	ary.	26th	Februa	ary.	27th	Febru	ary.	28th	Febru	ary.
Glace Bay,	n.s.	.									,		
Sydney,	,,	3.49	3.47	33.7	2.98	2.84	2.92	2.83	2.62	2.61	2.83	2.92	3.00
Guysborough,	,,	3.52			2.84		.	2.81		.	2.86		
Halifax,	ا پ «د	35.6	3.44	3.20	2.85	2.98	3.01	2.86	2.64	2.77	2.98	3.03	3.00
Charlottetown, I	'.E.I.	3.55	3.47	3.31	3.02	3.01	2.96	2.80	2.61		2.93	2.96	
Chatham,	N.B.	3.61	3.40	3.35	3.20	2.99	2.91	2.81	2.62	2.89	3.01	2.94	3.18
Bathurst,	,,								•		a l		
Father Point,	Q.	3.44	3·31	3.29	3.14	3.14	2.80	2.62	2.78	2.83	2.97	3.07	3.03
Quebec,	٠,,	3.49	3.28	3.17	3.15	3.04	2.91	2.74	2.89	3.06	3.15	2.98	3.04
Montreal,	,,	3.49	3.25	3.15	3.21	3·13	2.99	2.88	3.07	3.21	3.19	3.08	3.11
Cornwall,	Ont.												
Ottawa,	,,	3.20	3.23	3.16	3.28	3.12	2.86	2.96	3.15	3.28	3.19	3.11	3.11
Brockville,	,.	3.46	3.19	3.18	3.29	3.17	3.06	2 99	3·14	3.26	3.21	3.12	3.13
Kingston,	,,	3.48	3.22	3.21	3.37	3.25	3·11	3.10	3.19	3.31	3.24	3.18	3.16
Peterborough,	,,			•									
Toronto,	"	3.40	3·16	3.23	3.38	3.18	3.06	3.11	3.24	3.23	3.18	3.12	3.11
Port Dover,	73	3:37	3.13	3.22	3.41	3.21	3.10	3.16	3.26	3.26	3.22	3.13	3.12
Port Stanley,	91	3.36	3.14	3.29	3.43	3.20	3·11	3.20	3.28	3.28	3.23	3.16	3.14
Windsor,	,,			.		١.							
Granton,	,,							.					٠.
Stratford,	•>					١.							
Goderich,	"				!						.		.
Kincardine,	,,				.								١.
Saugeen,	,,	3.51	3.36	3.47	3.40	3.17	3.09	3.21	3.39	3.25	3.22	3.21	3.14
Stayner,	,,	3.40	3.25		3.35	3.03		3.11	3 26		3.13	3.11	.
Little Current,	,,		.						۱.		١.		
Fort Garry,	Man.	3.31	2.99	2.84	2.84	3.03	3.14	3.22	3.25	3.27	3.04	2.	2.68

1874.

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich " 7 25 a.m. 43 p.m. 4 25 p.m. 43 p.m.

Stations.		25tl	Febru	ary.	26tl	Febru	ary.	27tl	Febru	ary.	28tl	Febru	iary.
Glace Bay,	N.S.	•	· .	1 .		0	1 .			<u> </u>			1 °
Sydney,	,,	14	12	10	14	11	_3	11	21	10	4	0	8
Guysborough,	,,	9			8			11			4		١.
Halifax,	,,	14	24	17	12	15	0	18	26	15	13	15	1
Charlottetown,		5	12	11	9	11	1	14	25		4	1	
Chatham,	N.B.		15	9	4	15	_1	10	20	6	-5	14	-11
Bathurst,	,,												
Father Point,	Q.	8	16	13	4	14	9	14	9	8	2	11	12
Quebec,	,,	0	16	11	12	19	15	1 17	14	3	-1	16	9
Montreal,	,,	15	20	18	17	20	20	20	20	12	12	26	23
Cornwall,	Ont.												1.
Ottawa,	,,	3	19	16	5	21	21	21	20	5	2	21	15
B _{rockville} ,	,,	20	22	19	13	19	20	22	23	11	14	29	24
Kingston,	,,	20	24	18	11	22	23	21	27	16	18	28	22
Peterborough,	"			,	١.								١.
Poronto,	"	17	24	16	7	25	24	23	26	20	27	35	26
Port Dover,	`,,	20	23	17	8	22	24	25	33	28	35	34	29
Port Stanley,	"	20	22	16	5	22	25	23	35	30	30	36	27
Windsor,	"		-			-		-					
Granton,					i .								
Stratford,	,,	•	:							! :			
Goderich,	"	•	} .				'	} `			!		
Kincardine,		14	22	13	18	19	25	27	27	30	30	33	
Saugeen,	,,	9	13	2	11	22	25	26	25	16	29	35	2
Stayner,	,,	20	15		10	24		27	24		29	27	~
Little Current,	,,				}				}		•		
Fort Garry,	,, Man.	—20	6	6	3	8		5	1			21	27

TABLE I.—Barometer at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

10 50 p.m.

Greenwich "

0 43 p.m.

4 25 p.m. 9 43 p.m.

4 08 a.m. (of next day.)

Station.	i	18	t Marc	h.	2n	d Marc	eh.	3r	d Marc	h.	4t	h Marc	eb.
											 		
Glace Bay,	N.S.	3.10			2.88	• ,		3.24			3.16		
Sydney,	,,	3.14	3.08	2.90	2.90	3.25	3.36	3.34	3.27	3.28	3.21	3.05	2.91
Guysborough,	,,	3.15		•	2.94			3.27			3.08		
Halifax,	,,	3.09	3.01	2.85	2.98	3.22	3.24	3.25	3.21	3.19	3.02	2.81	2.68
Charlottetown,	P.E.I.	3.17	2.94		3.03	3.23		3.16	3.12	3.12	2.96	2.73	2.63
Chatham,	N.B.	3.24	2.87	2.83	3.18	3.15	3.14	3.09	2.99	3.02	2.81	2.47	2.51
Bathurst,	,,		,				•						
Father Point,	Q.	3.01	2.66		3.06		2.77	2.84	2.80	2.77	2.38	2.45	2.74
Quebec,	,,	2.99	2.62	2.74	2.99	2.91	2.83	2.92	2.75	2.63	2.36	2.43	2.79
Montreal,	,,	3.00	2.77	2.87	3.00	2.89	2.88	2.94	2.81	2.55	2.36	2.74	3.02
Cornwall,	Ont.			•							! •		
Ottawa,	٠,	2.96	2.78	2.88	2.99	2.83	2.86	2.94	2.68	2.54	2.43	2.86	3.14
Brockville,	,,	3.03	2.88	2.90	2.98	2.89	2.90	2.94	2.68	2.54	2.46	2.89	3.07
Kingston,	,,	3.07	2.97	2.99	3.01	2.95	2.98	2.96	2.71	2.57	2.45	2.87	3.12
Peterborough,	,,								,				
Toronto,	,,	3.03	2.95	2.97	2.97	2.83	2.90	2.88	2.51	2.41	2.58	3.00	3.14
Port Dover,	,,	3.05	2.99	3.00	3.00	2.88	2.93	2.88	2.53	2.46	2.61	3.00	3.19
Port Stanley	,,	3.08	3.03	3.05	3.01	2.94	3.06	2.94	2.23	2.46	2.67	3.05	3.20
Windsor,	"									.		.	
Granton,	,,	2.94			2.98			2.85			2.74		
Stratford,	,,											١.	١.
Goderich,	,,											١.	
Kincardine,	,,	•											
Saugeen,	,,	3.08	3.02	3.01	2.98	2.84	2.81	2.75	2.23	2.57	2.88	3.19	3.29
Stayner,	,,				2.88	2.73		2.83	2.45		2.76	3.11	
Little Current,	,,	2.92			2.78		٠	2.71			2.93		
Fort Garry,	Man.	2 65	2.34	2.17	2.45	2.82	3.07	3.31	3.28	3.18	3.09	2.95	2.96

TABLE 11.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich ,, 7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m. 10 50 p.m.

Stations.		18	t Marc	h	2nd	l Marcl	n.	3rd	March	ı.	4th	Marc	h.
Glace Bay,	N. S.	_5	°	•	26	°.	•	32	°.	· .	47	°. I	9
Sydney,	,,	-1	6	16	31	14	_4	11	40	38	45	45	44
Guysborough,	,,	,.	.	. \	. [. [.	.	.	. İ	.	
Halifax,	,,	_4	22	30	29	34	30	34	41	38	44	44	44
Charlottetown, I		6	13		23	17	.	31	38	38	42	44	44
Chatham,	N.B.	ı i	19	23	18	24	12	17	47	40	49	51	46
Bathurst,	,,				. !			.	. !	. [
Father Point,	Q.	2	19		10		24	39	38	40	48	28	10
Quebec,	,,	8	32	31	25	32	35	37	46	46	44	33	19
Montreal,	,,	22	40	37	34	44	39	37	46	45	44	27	18
Cornwall,	Ont.		. 1				. 1						
Ottawa,	,,	23	40	35	24	44	38	38	46	44	30	22	10
Brockville,	,,	24	37	34	34	47	40	38	52	47	33	22	10
Kingston,	,,	25	36	34	32	40	37	39	45	43	35	27	11
Peterborough,	,,							. '					
Toronto,	,,	27	41	33	33	46	37	36	44	42	29	23	1
Port Dover,	"	32	37	33	32	46	40	37	43	43	31	31	2
Port!!Stanley,	"	33	37	30	29	40	35	34	41	39	32	28	2
Windsor,		١.	1		١.	! ! .	1.					•	
Granton,	,,	35			32			35			2 8	١.	
Stratford,	,,				١.		١.					١.	
Godericb,	"					} .	١.	1.		١.			
Kincardine,	••	35	36	37	35	41	45	43	43	33	22	29	2
Saugeen,	,,	34	40	36	35	42	43	39	43	33	17	18	
Stayner,	,,				33	47		40	43		19	15	
Little Current,		13			33			34		<u> </u>	7		
Fort Garry,	Man.	1	37	33	9	10	-5	-19	- 13	_18	-20	10	

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich ,,

0 43 p.m.

9 43 p.m.

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.		51	h Mar	ch.	61	th Mar	ch.	71	th Mar	ch.	81	h Mar	ch.
Glace Bay,	N.S.	2.79			2.84	l i		2 99			2.75		
Sydney,	,,	2.80	2.78	2.87	2.89	2.93	2.98	3.02	2.98	2.91	2.77	2.55	2.43
Guysborough,	,,	2.73			2.92			2.99			2.69		
Halifax,	,,	2.73	2.92	3.01	3.08	3.07	3.07	3.07	2.95	2.85	2.64	2.31	2.33
Charlottetown,	P.E.I.	2.81	2.99	3.08	3.13	3.14	3.10	3.11	3.03	2.90	2.68	2.36	2.29
Chatham,	N.B.	2.94	3.06	3.27	3.36	3 22	3.21	3.20	3.00	2.95	2.79	2.41	2.35
Bathurst,	,,									ί.	١.		
Father Point,	Q.	3.08	3.32	3.48	3.65	3.36	3.31	3.18	2.97	2.82	2.65	2.31	2.22
Quebec,	,,	3.19	3.32	3.53	3.23	3.36	3.26	3.13	2.77	2.69	2.53	2.32	2.19
Montreal,	,,	3.37	3·44	3.53	3.59	3.35	3.25	3.05	2.70	2.58	2.49	2.39	2.31
Cornwall,	Ont.												
Ottawa,	,,	3.40	3.47	3.21	3.56	3.46	3.19	2.93	2.66	2.59	2.45	2.43	2.35
Brockville,	,,	3.37	3.46	3.49	3.49	3· 2 7	3 16	2.87	2.60	2.62	2.21	2.21	2.51
Kingston,	,,	3.43	3.20	3.58	3.53	3.37	3.16	3.05	2.66	2.65	2.57	2.61	2.62
Peterborough,	,,												
Toronto,	,,	3.40	3.43	3.41	3.27	3.00	2.88	2.57	2.52	2.54	2.56	2.65	2.70
Port Dover,	,,	3.35	3.86	3.32	3.17	2.92	2.82	2.51	2.56	2.57	2.63	2.76	2.86
Port Stanley,	,,	3.33	3.35	3.27	3.13	2.88	2.77	2.46	2.57	2.60	2.68	2.80	2.94
Windsor,	,,				•								
Granton,	,,	3.34			3.11			2.46			2 69		
Stratford,	,,												
Goderich,	,,						,			 .			
Kincardine,	,,			•									
Saugeen,	,,	3.45	3.48	3.37	3.17	3.01	2.89	2.45	2.47	2.45	2.59	2.79	2.90
Stayner,	,,	3.38	3.39		3.25	3.00	.	2.47	2.45				
Little Current,	,,	3.38			3.21			2.69			2.89	•	
Fort Garry,	Man,	2.95	2.71	2.73	2.88	2.98	3.01	3.17	3.28	3.33	3.21	3.49	3.49

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Teronto civil tim

7 25 a.m.

4 25 p.m. 9 43 p.m.

Greenwich ,

0 43 p.m.

Stations.	ļ	5t	h Marc	ch,	60	h Mar	ch.	76	h Mar	ch.	8	h Mar	ch.
Glace Bay,	N.S.	44			21			25			32		:
Sydney,	,,	44	33	28	22	22	25	30	31	31	33	35	34
Guysborough,	,,							.			١.		
Halifax,	,,	41	32	27	22	21	21	222	35	29	32) 37	31
Charlottetown,	P.E.I.	30	26	23	17	18	20	21	2 5	26	28	35	34
Chatham,	N.B.	26	33	17	13	24	14	14	20	23	25	33	34
Bathurst,	.,				<u>.</u>		١.						! .
Father Point,	Q.	10	20	10	6	18	12	10	18	14	18	23	22
Quebec,	,,	7	19	10	1 5	16	11	11	22	22	26	27	25
$\mathbf{M}_{ ext{ontreal}},$,,	10	21	15	11	20	19	17	25	31	30	33	31
Cornwall,	Ont.			١.	١.	١.				} .			
Ottawa,	,,	7	22	11	12	24	22	21	25	27	32	35	30
Brockville,	,,	15	21	14	14	21	20	23	32	35	31	32	29
Kingston,	,	12	21	18	17	25	22	21	34	34	32	31	27
Peterborough,	,,) .									-
Toronto,	,,	19	25	26	27	28	30	33	38	33	31	31	28
Port Dover,	,,	19	33	25	28	34	34	37	37	34	28	28	22
Port Stanley,	,,	21	35	28	30	35	35	37	3 5	33	28	27	22
Windsor,	,,												
Granton,	,,	19			27			35			25		
Stratford,	,,]							, -		
Goderich,	,,										1		Ì
Kincardine,	"	21	40	1 28	31	32	32	36	39	32	29	24	21
Sangeen,	1	18	33	25	27	34	31	34	34	32	27	29	22
Stayner,	"	18	26		23	27		34	37			1	**
Little Current,	,,	2			19	<u> </u>		26		•	27	.	.
Fort Garry,	,, Man.	8	25	21	2	14	10	1	2	_5	-18	1 7	-3

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m.

16 50 p.m.

Greenwich "

0 43 p.m.

0 43 p.m.

4 08 a.m. (of next day.)

Stations.		9th	Marc	h	10t	h Marc	h.	11t	h Marc	h.	12t	h Marc	h.
Glace Bay,	N. S.	2.26	.		2.19			2.12			1.84		
Sydney,	,,	2.32	2.13	2.13	2.20	2.21	2.24	2.16	2.01	1.90	1.88	1.93	2.02
Guysborough,	,,	2.27			2.16			2.14			1.92	.	
Halifax,	,,	2.32	2.50	2.14	2.14	2.18	2.22	2.21	2.11	2.04	2.00	2.05	2.16
Charlottetown, I	P.E.I.	2.32	2.31	2.12	2.15	2.19	2.23	2.21	2.10	1.99	1.95	1.98	2.00
Chatham,	N. B.	2.42	2.20	2.10	2.13	2.19	2.24	2.27	2.12	2.06	2.03	1.98	2.04
Bathurst,	,,	2.30			2.13			2.23			1.98		
Father Point,	Q.	2.25	2·28	2.17	2.13	2.12	2.12	2.20	2.24	2.13	2.03	2.07	2.09
Quebec,	,,	2.24	2.29	2.20	2.26	2.23	2.28	2.38	2.41	2.36	2.35	2.30	2.3
Montreal,	,,	2.35	2.48	2.51	2.49	2.44	2.51	2.55	2.57	2.58	2.55	2.50	2.54
Cornwall,	Ont.												
Ottawa,	,,	2.49	2.67	2.69	2.67	2.61	2.66	2 68	2.68	2.68	2.68	2.60	2.64
Brockville,	,,	2.59	2.70	2.75	2.72	2.68	2.72	2.72	2.69	2.70	2.68	2.61	2.67
Kingston,	,,	2.80	2.88	2.85	2.93	2.72	2.78	2.76	2.71	2.72	2.71	2.67	2.74
Peterborough,	,,												
Toronto,	,,	2.84	2.87	2.90	2.91	2.79	2.84	2.82	2.78	2.76	2.68	2.76	2.8
Port Dover,	,,	2.94	2.94	2.95	2.96	2.86	2.93	2.93	2.88	2.83	2.77	2.77	2.8
Port Stanley,	,,	3.00	3.02	3.03	3.02	2.94	3.08	2.99	2.92	2.89	2.83	2.81	2.9
Windsor,	,,											,	
Granton,	,,	2.99	, •		3.00			2.95			2.78		.
Stratford,	,,				.			.					
Goderich,	,,												
Kincardine,	,,												
Saugeen,	,,	3.04	3.12	3.09	3.10	3.01	3.02	2.97	2.95	2.87	2.79	2.87	2.9
Stayner,	,,	2.87	2.91		2.93	2.82		2.83	2.76		2.72	2.82	
Little Current,	,,	3.00			3.09			2.94			2.80		· } ·
Fort Garry,	Man.	3.23	3.47	3.45	3.24	3.49	3.50	3.52	3.45	3.46	3.55	3.45	3.4

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich "

7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m. 10 50 p.m.

Stations.		9t	h Marc	b.	10	th Mar	ch.	11:	th Mar	ch.	12	h Mar	ch.
Glace Bay,	N. S.	32		°.	31	<u> </u>	· .	31		ı°.	33	ı°.	ı.
Sydney,	,,	33	33	30	28	32	29	29	32	33	32	32	27
Guysborough,	,,					١.		.		١.			١.
Halifax,	,,	33	33	28	28	31	27	29	42	30	28	27	22
Charlottetown,	P.E.I.	31	30	29	29	38	28	28	37	30	26	26	23
Chatham,	N.B.	30	32	32	33	35	21	19	3	34	24	5	18
Bathurst,	,,	36			34] .	29			24		
Father Point,	Q.	28	30	27	36	32	32	24	20	15	10	15	16
Quebec,	,,	25	27	20	21	26	21	12	11	5	-1	7	7
Montreal,	,,	22	19	16	10	12	12	7	9	6	1	9	6
Cornwall,	Ont.] .	} .	ļ .						
Ottawa,	99	18	16	12	7	15	8	3	8	2	-1	8	4
${ m B_{rockville,}}$	**	18	15	11	9	14	11	4	8	7	2	10	
$\mathbf{Kingston},$,,	19	12	12	10	20	13	7	14	7	5	9	7
${ m P_{eterborough,}}$,,		١.	ļ									
Toronto,	,,	21	22	20	16	27	24	16	22	19	10	9	٤
$\mathbf{P}_{\mathbf{ort}\ \mathbf{Dover}}$,,	19	23	23	21	28	23	17	23	21	12	15	11
Port Stanley,	,,	18	25	24	22	28	21	15	27	20	12	16	10
$\mathbf{Windsor}$,	,,] .					١.
Granton,	,,	15			19] .] .	15			11		Ι.
Stratford,	"] .		
Goderich,	,,] .) .	.					
Kincardine,	2)	21	22	22	20	25	23	18	22	15	14	15	13
Sangeen,	,,	17	20	20	16	23	22	16	19	16	9	6	8
Stayner,	,,	16	18		16	23		13	19	١.	10	6	,
Little Current,	,,	8			5			-1		1.	-2		ĺ.
Fort Garry,	Man.	-5	10	7	12	6	2	-14	1	_10	-25	2	{ _ ç

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations,		131	h Marc	ch.	146	th Marc	ch.	15	h Mar	ch.	16	th Mar	c h.
Glace Bay,	N.S.	2.05			2.32			2.94			3.34		
S y dney,	,,	2.08	2.17	2.27	2.35	2.57	2.70	2.92	3.08	3.21	3.36	3.38	3.40
Guysborough,	,,	2.09			2.40			2.95	 •		3.35		
Halifax,	,,	2.19	2.24	2.33	2.50	2.67	2.82	3.03	3.11	3.26	3.38	3.34	3.40
Charlottetown,	P.E.I.	2.06	2.17	2.24	2.44	2.68	2.80	3.03	3.17	3.27	3.59	3.37	3.37
Chatham,	N.B.	2.08	2.12	2.25	2.57	2.76	2.93	3.16	3.26	3.38	3.50	3.32	3.36
Bathurst,	,,	2.02			2.56		 •				3.40		
Father Point,	Q.	2·10	2.13	2.35	2.70	2.90	3.00	3.50	3.24	3.32	3.35	3.38	3.27
Quebec,	,,	2.39	2.45	2.67	2.92	2.98	3.10	3.35	3.31	3.38	3.46	3.31	3.29
Mentreal,	,,	2.61	2.73	2.88	3.08	3.19	3.26	3.45	3.39	3.42	3.46	3.38	3.32
Cornwall,	Ont.												
Ottawa,	. 22	2.71	2.86	2.99	3.17	3.24	3.33	3.47	3.34	3.45	3.41	3.33	3.34
Brockville,	,,	2.76	2.88	3.00	3.17	3.22	3.30	3.43	3.37	3.40	3.40	3.28	3.27
Kingston,	,,	2.79	2.92	3.11	3.21	3.26	3.37	3.52	3.42	3.43	3.41	3.33	3.32
Peterborough,	,,											l } .	
Toronto,	31	2.90	2.97	3.13	3.31	3.28	3.38	3.48	3.35	3.27	3:27	3.19	3.16
Port Dover,	,,	2.95	3.04	3.20	3.33	3.32	3.40	3.45	3.32	3.25	3.23	3.13	3.11
Port Stanley,	, ,,	3.00	3.13	3.22	3.36	3.35	3.41	3.43	3.30	3.24	3.22	3.11	3.10
Windsor,	٠,						l .					١.	
Granton,	,,	2.98			3.35			3.40			3.25		
Stratford,	**		ľ .								١.	ί.	
Goderich,	**							١.			,		
Kincardine,	,•					.] .			.		
Saugeen,	,,	3.03	3.19	3.26	3.42	3.46	3.47	3.53	3.38	3.30	3.33	3·19	3.20
Stayner,	,,	2.93	3.08		3.32	3.34					3.27	3.14	.
Little Current,	,,	3.01			3.38			3.43			3.27		.
Fort Garry,	Man.	3.38	3.16	3.00	2.82	2.71	2.79	2.90	2.83	2.84	2.82	2.69	2.58

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich

0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations.		13t	h Marc	h.	14t	h Marc	h.	15t	h Marc	h.	16t	h Marc	h.
Glace Bay,	N.S.	23	°	9	31	.		32	8		36	•	•
Sydney,	,,	25	26	23	27	34	30	34	31	26	36	38	26
Guysborough,	,,		.								.	!	
Halifax,	,,	22	25	23	30	40	33	31	40	30	33	40	30
Charlottetown, I	P.E.I.	17	20	23	32	35	30	30	32	28	28	39	31
Chatham,	N.B.	17	29	32	30	35	25	29	43	30	25	46	30
Bathurst,	,,	21			32					.	30		
Father Point,	Q.	16	23	19	19	23	2 6	24	31	25	24	27	30
Quebec,	,,	6	21	16	14	21	17	17	29	16	12	37	28
Montreal,	,,	5	17	15	14	21	18	19	29	20	15	82	25
Cornwall,	Ont.											•	
Ottawa,	,,	4	17	15	13	24	20	15	34	20	14	40	28
Brockville,	,,	5	16	15	16	25	18	22	30	20	23	3 8	30
Kingston,	,,	6	18	15	18	30	19	18	29	24	22	41	 39
Peterborough,	19			١.									۱.,
Toronto,	,,	9	19	18	19	34	24	22	30	32	32	37	36
Port Dover,	"	11	20	16	21	35	26	22	42	30	30	38	31
Port Stanley,	,,	9	17	17	22	33	21	25	37	32	32	39	36
Windsor,	,,			١.			١.		١.	١.			! .
Granton,	,,	9			20	١.		21	١.		30		
Stratford,	29	١.		.		١.	١.	١.					١.
Goderich,	,,	١.			١.				١.	١.	١.	١.	١.
Kincardine,	,,	14	20	25	14	28	17	25	41	32	31	45	30
Saugeen,	,,	8	16	22	14	25	13	18	36	31	28	48	3
Stayner,	,,	10	16	١.	19	22		.	١.		32	37	
Little Current,	,,	4			11			10	١.		23	١.	
Fort Garry,	Man.		21	20	23	33	28	26	36	1 34	34	36	3

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

0 43 p.m. Greenwich ,,

The Height of the Barometer=27 inches + the numbers in the Table.

Stations.	17t	h Ma	rch.	18	th Ma	rch.	19	th Ma	rch.	20	th Ma	rch.	21	st Ma	rch.
Glace Bay, N.S.	3.34			3.36			2.80			2.11			2.47] .	.
Sydney ,,	3.38	3.29	3.37	3.41	3.24	3.03	2.81	2.62	2 · 39	2.15	2.24	2.37	2.50	2 65	2.6
Guysborough, ,,	3.36			3.37	} .		2.78		١.	2.19			2.58		1.
Halifax, ,,	3.41	3.36	3.36	3.35	3.18	2.96	2.77	2.57	2.38	2.29	2.44	2.63	2.76	2.72	2.65
Charl'town, PEI.	3.37	3 35	3.38	3.34	3.06	2.91	2.79	2.50	2.27	2 · 21	2.37	2.53	2.64	2.68	2.5
Chatham, N.B.	3.37	3.31	3.40	3.33	2.94	2.84	2.77	2.45	2 20	2.31	2.44	2.62	2.79	2.63	2.5
Bathurst, ,,	3.33			3.19			2.76			2.29			2.72		.
Father Point, Q.	3 33	3.29	3.17	2.93	2.75	2.77	2.70	2.21	1 97	2.41	2.47	2.75	2-84	2.63	2.61
Quebec, ,,	3 34	3.16	3.12	2.99	2.92	2.87	2.68	2.18	2.26	2.70	2.76	2.90	2.83	2 53	2.58
Montreal, ,,	3.30	3.16	3.07	2.97	2.87	2.82	2 61	2.33	2.54	2.91	2.93	2.97	2.80	2.58	2.72
Cornwall, Ont.															ļ .
Ottawa, ,,	3 25	3.13	3 05	2.96	2.86	2.84	2.54	2.35	2.64	2.97	3.04	2.94	2.78	2.63	2.74
Brockville, "	3 21	3.08	3.05	2.98	2.87	2.84	2.63	2.45	2 65	2.98	2.98	3.00	2 84	2.69	2.78
Kingston, ,,	3.22	3.12	3.07	3.02	2.98	2.91	2.72	2 62	2.83	3.13	3.09	3.07	2.91	2.80	2.83
Peterborough, ,,	•] .] .				1 .
Toronto, ,,	3.11	2.99	2 95	2.90	2.85	2.79	2.56	2.63	2.85	3 02	3.02	3.00	2.86	(2 OU	2.83
Port Dover, ,,	3.04	2.95	2.95	2.91	2.86	2.77	2.60	2.67	2.88	3.01	3.03	3.05	2.95	2 00	2.83
Port Stanley, ,,	3.05	2.95	2.95	2.93	2.86	2.78	2.64	2.72	2.93	3.03	3.04	3.02	2.97	2.88	2.87
Windsor, ,,			i •			١.									1 .
Granton, ,,	3.06			2.93			2.55			3.03		ļ.	2.91		
Stratford, ,,	.•												. 1		
Goderich, "															
Kincardine, ,,													.		
Saugeen, ,,	3.08	2.98	2.91	2.94	2.90	2.73	2.52	2.84	3.61	3 12	3.06	2.88	2.89	2.89	2·87
Stayner, ,,	3.08	2.93		2.86	2.80		2.48	2.75		3.00	2.95		2.78	2.85	
Little Current ,,	3.06			2.81			2.41		,	3.01			2.76		
Fort Garry, Man.	2.46	2.48	2.72	2.98	3.09	3.18	2.96	2.83	2 80	2.72	2.93	3.02	3.03	2.82	2.88

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich ,,

4 25 p.m. 9 43 p.m. 0 43 p.m.

Glace Bay, N.S. 41	Stations.	17t	h Ma	rch.	18t	h Ma	rch.	19t	h Ма	ch.	201	h Ma	rch.	.21a	t Ma	rch,
Bydney, 40 45 26 37 35 33 88 39 35 50 31 24 20 26 1 1 1 24 20 26 1 2 1 2 2 20 26 2 37 3 3 88 39 35 50 31 24 20 26 2 37 4 41 38 44 35 26 25 37 3 3 3 3 3 3 44 41 38 44 35 26 25 37 3 3 3 40 38 35 36 44 39 42 30 22 17 33 3 40 41 47 38 35 46 42 18 21 6 12 23 44 42 47 38 35 46 42 18 21 6 12 42<	Glace Bay, N.S.	41	٥	°.		0	°		°		-	0	i		•	°
Gnysborough, ,,	Sydney.	40	45	26	37	35	33	88	39		50	21	i		9.0	26
Halifax, ,, 34 43 30 36 38 37 44 41 38 44 35 26 25 37 4 Charl'town, IPEI. 32 47 29 32 36 35 36 44 39 42 30 22 17 32 1 Chatham, N.B. 31 47 30 32 41 41 35 42 42 36 27 17 15 33 2 Bathurst, ,, 33 35 37 30 16	Guysborough															
Charl'town, FEI. 32	Halifax,				36					i	i		}			82
Chatham, N.B. 31 47 30 32 41 41 35 42 42 36 27 17 15 33 5 8 8 8 8 41 42 47 38 35 46 42 18 21 6 19 23 1	Charl'town. IPEI.	32	47	29	32	36	35	36	44	39	42	30	22		-	30
Bathurst, , 33	Chatham, N.B.	31	47	30	32	41	41	35	42	42	36		Į			27
Pather Point, Q. 29 34 34 42 47 38 35 46 42 18 21 6 12 23 1 Quebec, ,, 24 96 33 38 42 36 38 39 40 15 24 17 18 24 5	Bathurst.	33			35		١.	37			30					~"
Glaebec, , 24 96 33 38 42 36 38 39 40 15 24 17 18 24 28 40 41 47 45 40 49 38 20 32 26 29 42 3 Cornwall, Ont. .	Pather Point, Q.	29	34	34	42	47	38	35	46	42	18	21				19
Montreal, ,, 24 88 40 41 47 45 40 49 38 20 32 26 29 42 3	Rebec.	24	96	33	38	42	36	38	39	40	15	24	17	18	24	20
Cornwall, Ont	Montreal.	24	88	40	41	47	45	40	49	38	20	32				33
Ottawa, ,, 28 26 35 37 49 37 36 49 33 13 31 23 33 48 3 Brockville, ,, 32 40 40 42 50 46 45 48 38 24 30 29 34 45 3 Kingston, ,, 36 43 39 42 44 46 44 48 33 26 31 29 35 45 3 Peterberough, . <td>Cornwall, Ont.</td> <td></td>	Cornwall, Ont.															
Brockville, ,, 32 40 40 42 50 46 45 48 38 24 30 29 34 45 3 Kingston, ,, 36 43 39 42 44 46 44 48 33 26 31 29 35 45 3 Peterberough, ,, . .	Ottawa.	28	26	35	37	49	37	36	49	33	13	81	23	1		32
Kingston, ,, 36 43 39 42 44 46 44 48 33 26 31 29 35 45 3 Peterberough, ,,	Brockville	32	40	40	42	50	46	45	48	38	24					34
Peterberough, ,,	Kingston	36	4 3	39	42	44	46	44	48	33	26	81				33
Port Dover, , 35 39 39 39 43 42 40 47 34 30 36 33 38 47 3 Port Dover, , 37 48 42 47 44 45 42 49 37 31 38 33 38 44 4 Port Stanley, , 39 45 44 44 47 46 41 47 35 32 38 33 36 42 4 Windsor, ,	Peterberough															
Port Dover, 37 48 42 47 44 45 42 49 37 81 38 33 38 44 44 47 46 41 47 35 32 38 33 36 42 48 Windsor, . <td>coronto.</td> <td></td> <td></td> <td> </td> <td>39</td> <td>43</td> <td>42</td> <td></td> <td></td> <td>34</td> <td>30</td> <td>36</td> <td>33</td> <td>38</td> <td></td> <td>32</td>	coronto.				39	43	42			34	30	36	33	38		32
Fort Stanley, ,, 39 45 44 44 47 46 41 47 35 32 38 33 36 42 4 Windsor,	Port Dover	37	48	42	47	44	45	42	49	37	81	38			-	42
Granton, , 35	Fort Stanley	39	45	44	44	47	46	41	47	35	32	38	33	36		40
Granton, ,, 35 46 53 28 38	"'Indsor												-		_	100
Stratford, ,,	Granton.	35			46			1			28			38		
Goderich, ,,	Stratford.															i ·
Kincardine, ,, 41 50 52 48 44 46 52 41 29 28 37 37 37 38 9 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Goderich								1							
Stayner, ,, 35 42 40 48 48 37 51 33 26 26 34 36 38 32 55 42 49 . 47 34 . 24 34 . 41 33 Little Current 33	Kincardine	1	'													29
Stayner, ,, 35 39 . 52 49 . 47 34 . 24 34 . 41 33	osugeen .	1					_					•				29
dittle Current 22	Stayner							1					-		-	20
Port Garry Man 25 07 00 10 05 19 0 00 14 14 15	Little Current	1	J.						31			31			J	
"^^*y.DEBR.(A) (Z/) ZZ 19 (Z) ((Z) 8 2Z 14 (14 (15 (14 (16 (16 (16 (16 (16 (16 (16	Fort Garry, Man.	35	27	22	19	25	12	8	22	14	14	15	4	6 6	29	16

TABLE I.—Barometer at 329 Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

7 25 a.m. Toronto civil time

4 25 p.m. 9 43 p.m.

Greenwich

9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

Stations.	221	nd Mai	rch.	231	rd Ma	rch.	241	h Ma	rch.	251	h Ma	reh,	2 6t	h Ma	rch.
Glace Bay, N. S.	2.44			2·42			2.22			2·89			2.72		
Sydney, "	2.45	2.48	2.48	2·47	2·38	2·49	2.60	2.67	2.78	2.95	2.95	2.85	2.75	2.87	2.81
Guysborough, "	2.46	.		2·49			2.64			3.00			2.78		
Halifax, ,,	2.52	2.43	2.52	2.53	2.44	2.63	2.74	2·80	2.93	3.13	2.99	2.86	2.82	2.83	2.70
Charl'town, PEI.	2.51	2.50	2.52	2.52	2·49	2.60	2.69	2.77	2·91	3.05	2.85	2.75	2.76	2.85	2.78
Chatham, N.B.	2.59	2.58	2.69	2 66	2.51	2.71	2.85	2.88	3.00	3.09	2.73	2.69	2.83	2.82	2.69
Bathurst, ,,		. ;		2.28			2·83			3.00			2.85		
Father Point, Q.	2.61	2.56	2.58	2.57	2.63	2.78	2.99	2.95	3.00	2.83	2.55	2.45	2.88	2.62	2.51
Quebec, ,,	2.65	2.61	2.54	2.56	2.72	3.01	3.16	3.03	3.06	2.88	2 61	2.66	2.84	2.68	2.40
Montreal, ,,	2.74	2.65	2.50	2.68	3.00	3.25	3.30	3·19	3.15	2.94	2.76	2.79	2.86	2.65	2.68
Cornwall, Ont	.] .) .									
Ottawa, ,,	2.76	2.63	2.51	2.87	3.16	3.36	3 · 32	3.22	3.16	2.94	2.73	2.80	2.83	2.61	2.76
Brockville, "	2.82	2.69	2.57	2.90	3.10	3.27	3.33	3.22	3.21	3.01	2.85	2.90	2.84	2.64	2.68
Kingston, ,,	2.90	2.73	2.73	2.99	3.13	3.38	3.35	3.28	3.25	3.11	2.91	2.95	2.86	2.69	2.91
Peterborough, ,,		1.					.						.		1.
Toronto, ,,	2.89	2.66	2.87	3.17	3.27	3.36	3.41	3.33	3.18	3.09	2.90	2.94	2.78	2.70	3.06
Port Dover, "	2-93	2.68	2.92	3 · 22	3.32	3.38	3.45	3.36	3.24	3.15	2.94	2.92	2.80	2.68	
Port Stanley, ,,	2.94	2.74	2.95	3.26	3.34	3.41	3.47	3.38	3.27	3.18	2.98	2.93	2.83	2.78	3.13
Windsor, ,,													.		
Granton, "	2.80			3.26		.	3.45			3.11	.		2.80	.	
Stratford, ,,													.	.	1.
Goderich, ,,												.		.	1.
Kincardine, ,,									1.
Saugeen, ,,	2.89	2.67	2.93	3.28	3.42	3.45	3.49	3.28	3.10	3.03	2.83	2.91	2.85	2.95	3.01
Stayner, ,		1.	·	3.19	3.28		3.37	3.23		2.95	2.82	1.	2.71	2.86	1.
Little Current,	2.84			3.30		1.	3.38		.	2.82			2.84		1.
Fort Garry, Man	1. 3.27	3.48	3.55	3.59	3.58	3.45	294	2.76	2.92	3.23	3.23	3.23	3.25	2.99	2.89

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich

4 25 p.m. 9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.) 0 43 p.m.

Stations.	22nd	Marc	h.	23rd	Mar	eh.	24tl	Mar	ch.	25tl	Mar	ch.	26th	Marc	ch.
Place Bay, N.S.	33	°	•	25	•	8	19		9	16		•	38	9]	9
ydney, ,,	34	24	19	28	22	17	20	16	9	17	22	26	35	29	25
luysborough, ,,	 [. (.	.	
Halifax, "	37	35	28	26	29	19	23	16	10	15	29	32	39	40	34
harl'town, PEI.	28	26	22	20	21	18	18	13	8	9	28	31	35	27	26
Chatham, N.B.	21	27	16	19	25	15	8	9	2	9	31	29	28	28	25
Bathurst, .,				8			6		.	10			23	. }	
Father Point, Q.	19	22	14	16	24	15	-3	8	2	10	31	31	14	24	20
Quebec, ,,	17	24	15	16	22	3	_5	10	6	11	31	33	20	19	21
Montreal, ,,	22	32	27	19	14	2	6	20	14	27	37	34	25	22	25
Chatham, Ont.		 1	.	
Ottawa, ,,	25	32	30	12	12	3	3	22	15	27	39	36	21	31	24
Brockville, "	35	33	31	16	16	8	16	24	21	32	37	33	33	35	32
Kingston, "	29	35	26	17	19	11	10	23	21	26	84	34	34	34	25
Peterborough, ,,					•										
Toronto, ,,	30	38	25	17	16	16	15	27	28	29	40	37	36	42	25
Port Dover, "	31	40	27	18	17	15	10	27	29	31	43	41	37	45	24
Port Stanley, "	30	38	26	17	21	15	17	30	30	30	38	37	36	39	24
Windsor, ,,								١.	١.						
Granton, ,,	29			14			16		١.	28			33		
Stratford, ,,			' .			i .			١.						
Goderich, ,,								١.				ί.		. 1	
Kincardine, ,,	30	26	20	13	19	16	20	28	26	1 30	36	33	32	35	2
Saugeen, ,,	28	30	19	13	14	14	11	21	24	29	34	33	29	32	20
Stayner,	1		1 .	9	13		17	23		33	36		40	21	
Little Current	1 22			1		.	10			33		1	20		
Fort Garry, Man		2	-5	-15	14	3	18	30	21	-3	1	1	-6	15	1

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

Stationa.	274	h Mar	ch.	28t	h Mai	rch.	291	h Mai	rch.	30t	h Ma	rch.	31s	t Mar	ch.
Glace Bay, N.S.	2.41		•	3.04			2.77			3.12			2.69		
Sydney, ,,	2.46	2.72	2.95	8.08	2.93	2.79	2.79	2.90	3· 09	3.12	2196	2.80	2.71	2.62	2.8
Guysborough, ,,	2.42			3.09			2.80			3.09			2.73,		
Halifax, "	2.20	2.81	3.02	3.10	2.84	2.80	2.86	2.95	3.10	3.11	2.87	2.76	2.76	2.79	3.0
Charl'town, PEI.	2.43	2.80	3.00	3.05	2.83	2.76	2.81	2.92	3.09	3.09	2.80	2.70	2.75	2.81	2.6
Chatham, N.B.	2.60	2.83	3.07	3.06	2.75	2.85	2.91	3.02	3.18	3.08	2 69	2.75	2.81	2.92	3.1
Bathurst, ,.	2.58		, I	2.96				.		2.94			2.81		١.
Father Point, Q.	2.68	2 86	2.91	2.85	2.78	2.71	2.96	3.05	3·0 2	2.72	2.65	2.89	2.86	2.94	3.1
Quebec, ,,	2.93	2.30	2·91	2.90	2.74	2.77	3.14	2.94	2.96	2.77	2.66	2.81	3.03	3.08	3.5
Montreal, "	3.09	2.96	2.95	2.99	2.85	2.96	3.19	3.05	2.98	2.84	2.78	2.86	3.17	3.17	3.5
Cornwall, Ont.											-	.			
Ottawa, ,,	3.15	2.94	2.96	3.02	2.87	3.02	3.18	3.02	2.96	2 85	2.78	2.96	3.20	3.20	3:
Brockville, ,,	3.09	3.00	2.94	3.01	2.92	3.03	3.20	3.08	3.04	2.89	2.86	2.95	3.19	3.17	3.
Kingston, "	3.16	3.03	3.01	2.99	2.99	3.13	3.27	3.13	3.04	2.94	2 · 91	3.03	3.18	3.17	3.
Peterborough, ,,								۱.							
Toronto, "	3.12	2.95	2.97	3.05	3.04	3.19	3.25	3.06	3.00	2.95	2.95	3.09	3.18	3.16	3.
Port Dover, "	3.16	3.01	2.99	3.07	3.08	3.22	3.28	3.13	3.04	3.00	2.98	3.07	3.17	3.13	3
Port Stanley, ,,	3.17	3.02	3.02	3.07	3.11	3.24	3.29	3.13	3.08	3.04	3.00	3.09	3.17	3.16	3.
Windsor, ,,	.							.] .			
Granton, "	3.13			3.08			3.27			3.01			3.17		-
Stratford, "								! [•	١.				.		
Goderich, "			.			.		.							
Kincardine, ,,		.		.				.					 -		
Saugeen, ,,	3.10	3.07	3.09	3.08	3.10	3.23	3.29	3.11	2.98	3.02	3.10	3.20	3.34	3.33	3
Stayner, ,,	3.05	2.92		2.98		3.12		.		2.91	3.03		3.26	3.24	
Little Current,,	3.03			3.00			3.11			2.89			3.25		
Fort Garry, Man	2.96	3.24	3.27	3.30	3.23	3.21	3.13	3.04	3.17	3.31	3.38	3.43	3.42	3.10	8.

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

Greenwich "

0 43 p.m.

Stations.	27	th Ms	rch.	281	th M a	rch.	29	th Ma	rch.	30	th Ma	rch.	31	st Ma	rch.
Glace Bay, N.S.	36	°.	°	c 25	ı °	<u> </u>	32		ı °	24		°	32	l °	1 .
Sydney, "	30	27	22	24	26	23	33	22	15	27	27	27	32	28	1.5
Guysborough ,,			ļ				١.								
Halifax, ,,	43	34	25	26	28	26	34	28	18	29	32	31	34	27	16
Charl'town, PEI.	3 6	30	22	24	29	26	26	25	16	19	29	28	25	20	10
('hatham, N.B.	26	28	12	13	32	19	18	20	8	14	37	26	18	16	5
Bathurst, ,,	25	ļ 		15						18	١.		5		ĺ.
Father Point, Q.	19	20	17	17	26	24	7	15	10	19	25	19	7	10	8
Quebec, "	9	20	16	20	25	21	4	18	14	20	27	19	3	10	0
Montreal, ,,	16	29	24	24	31	21	13	26	22	28	35	27	12	21	10
Cornwall, Ont.															١.
Ottawa, ,,	10	29	22	21	29	21	10	29	23	21	33	22	9	21	10
Brockville, ,	28	27	30	27	28	23	22	28	25	35	32	29	14	22	17
Kingston, ,,	20	27	27	25	31	21	16	28	30	31	35	31	16	24	18
Peterborough, ,,] .					
Toronto, ,,	25	35	31	27	32	21	21	36	30	31	37	24	19	26	19
Port Dover, "	23	32	30	27	33	23	21	34	31	31	38	27	21	28	19
Port Stanley, ,,	24	33	30	28	34	21	21	35	31	31	43	27	22	27	20
Windsor, ,,	.														
Granton, ,,	22			25			21			29			16		
Stratford, ,,		,		. 1											
Goderich, "	.	•										.			
Kincardine, ,,	23	26	20	19	26	1.8	29	34	27	27	30	22	18	23	14
Saugeen, ,,	20	27	25	25	19	13	14	29	19	27	26	18	13	19	8
Stayner, ,.	21	30		26	20	.		,		31	27		16	14	
Little Current ,,	10			12		. }	13			22	. (. !	10		
Fort Carry, Man.	6	а	4	-10	18	7	0	24	12	5	1.5	5	0	80	23

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

10 50 p.m.

Greenwich " 0 43 p.m.

The Height of the Barometer=37 inches + the numbers in the Table.

Stations.	1.	st Apr	il.	200	i Apr	il.	3r	d Apr	il.	41	h Apr	il.	5t	h Apr	11.
Glace Bay, N.S.	3.02	.		3.18	.	•	2·83			2·71	.		2.72		
Sydney, ,,	3.06	3.25	3.31	3.24	3.04	2.99	2.88	2.59	2.56	2.76	2.58	2.45	2.76	2.97	3·17
Guysberough, ,,	3.09	:		3.12			2.81			2.74			2.86	.	
Halifax, ,,	3.20	3.22	3.24	3.12	2.98	2.94	2·81	2.62	2 62	2.77	2.54	2.72	3.02	3·10	3.24
Charl'town, PEI.	3.14	3.26	3 · 25	3.18	2.97	2.96	2.84	2.61	2 54	2.75	2.62	2.68	2.87	2.99	3.14
Chatham, N.B.	3.28	3.19	3.26	3.18	2.92	2.91	2.79	2.53	2.21	2.79	2.64	2.82	2.92	3.05	3.16
Bathurst, ,,	3· 2 7			3.08			2.72			2.76	. !				
Father Point, Q.	3· 2 8	3· 2 6	3.09	2.90	2.81	2.75	2.54	2.46	2.73	2.75	2.67	2.83	2.88	2.94	2.94
Quebec, ,,	3.36	3.16	3.05	2.95	2.73	2.66	2.49	2.56	2.72	2.88	2.83	2.99	3·10	3.02	2.96
Montreal, ,,	3.37	3.15	3.05	2.95	2.78	2.70	2.61	2.76	2.81	3.00	3.00	3·18	3.21	3.09	2.92
Cornwall, Ont.] .]													
Ottawa, "	3.35	3.14	3.04	2.92	2.73	2.67	2.72	2.77	2.86	3.04	3.07	3.22	3 27	3.06	2.91
Brockville, ,,	3.30	3.09	3.04	2.92	2.77	2.67	2.78	2.79	2.81	3.05	3.08	3.18	3.26	3.07	2.91
Kingston, ,,	3.30	3.11	3.03	2.94	2.79	2.75	2.85	2.84	2.90	3.09	3.12	3.27	3.27	3.10	2.82
Peterborough, ,,															•
Toronto, "	3.22	3.0%	2.98	2.30	2.75	2.78	2.90	2.77	2.96	3.16	3.22	3.29	3.27	2.92	2.64
Port Dover, ,,	3.25	3.04	3.01	2.94	2.79	2.81	2.96	2.95	2.98	3.16	3.58	3.31	3.27	2.89	2.60
Port Stanley, ,,	3.23	3.07	3.03	2.96	2.82	2.87	2.95	2 87	2 99	3.18	3.31	3.31	3.24	2.83	2.64
Windsor, ,,				.						1.		į .			
Granton, ,,	3.23	ļ.	.	2.91	١.		2.93			3.18			3 22	•	١.
Stratford, ,,			۱.							.				•	1.
Goderich, ,,				1.					
Kincardine, ,,					.			1.		.	{ .	.	j .		
Saugeen, ,,	3.31	3.00	2.90	2.88	2.90	2.87	2.93	2.99	3.11	3.27	3.29	3.26	3.28	2.90	2.71
Stayner, ,,	3.22	2.97		2.82	2.76		2.87	2 93		3.16	3.24	.			.
Little Current ,,	3 ·13	1		2.78	1 .	.	3.90	1,		3.13			3.17		1 .
Fort Garry, May	. 3.12	3.10	3.53	3.33	3.12	3.05	3.26	3.17	3.38	3.35	3.16	3.02	2.70	2.74	2.97

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

Stations.	18	t Apr	il.	2 nd	Apr	i1.	3re	l Apri	a.	4tl	Apr	i1.	5tl	Apri	il.
Glace Bay, N.S.	22		•	23	.	•	28	0	0	° 31	°	•	°	°	٠
Sydney, ,	24	21	18	24	26	25	30	32	28	32	31	18	17	24	20
Guysborough, ,,			.		.	. ,	.	. }		. }	.		.	.	
Halifax, ,	14	26	19	26	28	29	30	34	33	32	26	16	19	29	25
Charl'town, PEI.	13	24	14	19	32	23	23	33	30	24	21	15	14	31	26
Chatham, N.B.	10	27	12	17	38	22	29	35	31	16	23	10	16	33	24
Bathurst, ,,	11		. }	19	.	.	27		.	15		.	.	.	
Father Point, Q.	4	15	10	22	27	24	23	28	12	7	9	5	19	21	22
Quebec, ,,	_7	14	3	15	33	29	32	25	12	4	15	8	11.	30	25
Montreal, ,,	5	24	17	13	41	35	33	28	21	10	20	14	20	34	3
Cornwall, Ont.		.]	.	. [.	. [. [. [.	. : (.	
Ottawa, "	0	29	15	14	40	35	23	26	17	7	20	14	15	36	28
Brockville, "	20	31	25	36	39	33	28	29	22	18	22	18	29	32	28
Kingston, "	16	32	27	34	37	33	20	27	22	11	21	16	. 24	31	31
Peterborough, ,,			.									. !			
Toronto, ,,	19	29	28	31	40	27	21	31	17	12	23	19	23	28	25
Port Dover, "	16	34	27	32	39	30	22	29	18	11	24	20	25	26	2 9
Port Stanley, ,,	19	34	28	34	39	26	23	30	17	15	25	20	26	26	29
Windsor, ,,					.										
Granton, ,,	17			31			18			14			28		
Stratford, ,,															
Goderich, "															١.
Kincardine, "	15	33	30	32	30	22	26	23	16	12	24	12	27	30	24
Saugeen, "	12	28	26	31	21	20	18	18	13	9	22	10	18	29	23
Stayner, "	17	24		32	33		20	16		9	18				١.
Little Current ,,	13			28			11			9			20		ļ.
Fort Garry, Man.	18	24	11	-5	22	10	13	10	2	-2	24	16	17	29	13

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

Stations.	61	h Apı	·il.	71	th Apı	il.	81	h Apr	il.	91	ь Арі	il.	100	h Apı	nil.
Glace Bay, N.S.	3·17			3.03			3.14			2.96			3·10		
Sydney, ,,	3.23	2.66	2.81	3.02	3.03	3.04	3·16	3.14	3.12	2.95	3.00	3.16	3.14	2.59	2.44
Guysborough, ,,	3 20			3.03			3.13			2.92			3.04		
Halifax, "	3·13	2.65	2.95	3.02	3.04	3.06.	3.11	3.09	3.09	2.88	2.94	3.11	2.91	2.37	2.49
Charl'town, PEI.	3.08	2.64	2.87	3.02	2.97	3.03	3-14	3.09	3.06	2.95	3.08	3.19	3.04	2.59	2.58
Chatham, N.B.	3.02	2.66	2.88	2.99	2.88	3.01	3.12	2.99	3.00	2.98	3.10	3.19	3.10	2.79	2.80
Bathurst, ,,	2.93			2.92			3.13			3.02			3.10	-	
Father Point, Q.	2.80	2.80	2.78	2.77	2.87	3.01	2.97	2.91	2.99	3.09	3.12	3.17	3.07	2 ·83	2.82
Quebec,	2.72	2.85	2.87	2.85	2.81	2.92	3.03	3.03	3.00	3.11	3.04	3.06	2.88	2.77	2.78
Montreal, ,,	2.68	2.91	2.98	2.95	2 91	2.99	3.10	3.04	3.03	3.14	3.13	3.08	2.90	2.81	2.85
Cornwall, Ont.	.								.		·	,		,.	
Ottawa, "	2.73	2.92	2.96	2.97	2.92	2.99	3.09	3.05	3.02	3.19	3.14	3.04	2.90	2.81	2.85
Brockville, ,,	2.70	2.99	3.02	2.98	2.96	3.02	3.11	3.03	3.02	3.16	3.13	3.08	2.88	2.86	2.88
Kingston, ,,	2.84	3.03	3.04	3.03	3.02	3.07	3.14	3.03	3.03	3.18	3.12	3.03	2.89	2.90	2.94
Peterborough, ,,											.				
Toronto, ,,	2.96	2.98	3.00	2.99	3.03	3.09	3.06	2.97	3.04	3.18	3.08	3.01	2.93	2.90	2.96
Port Dover, ,,	3.00	3.03	3.01	3.03	3.04	3.08	3.05	2.92	3.03	3.14	3.05	2.91	2.91	2.95	2.99
Port Stanley, "	3.03	3.04	3 01	3.03	3.05	3.06	3.03	2.92	3.05	3.12	3.03	2.92	2.92	2.98	2.89
Windsor, ,,							İ٠								.
Granton, ,,	3.00			3.03	į .		3.03			3.19			2.97	.	
Stratford, ,,	
Goderich, ,,	
Kincardine, ,,					.										
Saugeen, "	2.95	2.98	3.01	3.08	3.07	3.06	3.03	2.98	3.12	3.25	3.13	3.05	3.01	2.96	2.95
Stayner, ,,	2.94	2.92		3.05	3.03		3.09	2.96		3.22	3.11		2.96	2.91	
Little Current ,,	2.88			3.00		1	3.05	! .	.	3.31			2.99		
Fort Garry, Man	1	3,03	3.03	3,10	3.08	3.25	3.49	3 37	3.21	3,18	3'12	3.02	3.14	3.36	8.41

TABLE II .- Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

Stations.	6 t	h Apr	ril.	7t	h Apr	il.	8t	h Apr	il.	91	h Ap	ril.	10	th Ap	ril.
Glace Bay, N.S.	32	°.	9	36	°	· .	34			33		0	29		
Sydney, ,,	35	39	32	37	33	32	35	37	33	35	30	28	29	26	2/
Guysborough, ,,															
Halifax, ,,	29	39	34	34	32	32	34	34	33	34	36	30	27	32	27
Charl'town, PEI	26	37	31	31	34	34	34	39	33	33	31	27	28	26	26
Chatham N.B.	28	32	26	31	41	34	33	44	33	32	30	24	27	24	21
Bathurst, ,,	27			31			32			32			26		
Father Point, Q.	27	32	27	31	3 6	28	29	31	30	21	28	27	24	23	24
Quebec, "	25	34	30	31	39	29	30	35	30	28	30	24	25	27	26
Montreal, ,,	30	36	31	33	44	36	32	32	29	27	88	29	25	30	30
Cornwall, Ont.															
Ottawa, "	29	40	33	34	43	33	29	34	28	23	37	29	30	42	30
Brockville, "	31	33	31	33	39	33	38	32	29	28	35	31	25	34	30
Kingston, ,,	32	36	30	34	38	32	32	31	30	29	38	31	27	34	35
Peterborough, ,,					,										
Toronto, ,,	28	36	33	35	38	31	33	36	33	33	34	32	32	43	34
Port Dover, ,,	27	3 2	3 2	27	39	32	32	37	30	30	34	31	30	43	33
Port Stanley, ,,	27	35	31	27	37	29	34	41	31	30	37	32	30	41	34
Windsor, ,,															
Granton, ,,	27			30			32	٠ ـ		28	•		30		
Stratford, ,,													•		
Goderich, "															
Kincardine, "	26	36	34	30	32	28	34	33	30	25	31	26	28	34	31
Saugeen, "	21	40	34	27	30	22	29	3 3	27	24	28	23	24	35	3:
Stayner, ,,	33	38		33	36		32	36		28	2 6		29	37	١٠.
Little Current ,,	33			29			28			17		,	20		
Fort Garry, Man.	3	26	14	7	23	11	·6	22	21	25	36	30	24	22	1:

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

The Height of the Barometer = 27 inches + the numbers in the Table.

Statians.	11	h Apı	ril.	12	th Apr	il.	131	h Apr	il.	14	th Ap	ril.	15	h Ap	ril.
Glace Bay, N.S.	2.63			2.43			3.14			3.24			2.91	•	
Sydne y , "	2.63	2.85	2.92	2.49	2·42	2·80	3.14	3.25	3.33	3.40	3.16	3.12	2.96	2.74	2.61
Guysborough, ,.	2.69			2.45			3.16			3.34			2.91		
Halifax, "	2.79	2.82	2.72	2.59	2.85	3.07	3.27	3.30	3.34	3.29	3.24	3.08	2.94	2.76	2.53
Charl'town, PEI	2.79	2.85	2.71	2 44	2.83	3.03	3.22	3.29	3.28	3.22	3.08	3.02	2.88	2.70	2.20
Chatham, N.B.	2.90	2.74	2.69	2.75	3.05	3.17	3.41	3.21	3.22	3.17	2.98	2.96	2.82	2.60	2.50
Bathurst, ,,	2.84						3.35			3.08			2.75		
Father Point, Q.	2.75	2.67	2.76	3.14	3·12	3.16	3.38	3.20	2.97	2.94	2.82	2.72	2.60	2·49	2 · 41
Quebec, ,,	2.74	2.67	2.85	3.23	3.23	3.36	3.47	3.22	3.12	3.13	2.84	2.73	2.65	2.21	2.52
Montresl, ,,	2.78	2·81	3.16	3.45	3.39	3.47	3.50	3.58	3.21	3.09	2.88	2.78	2.72	2.28	2.75
Cornwall, Ont.			١.									.			١.
Ottawa, "	2.71	2.95	3.58	3.34	3.43	3.20	3.49	3.26	3.20	3.08	2.82	2.74	2.71	2.63	2.8
Brockville, "	2.85	3.02	3.25	3.53	3.47	3.48	3.20	3.27	3.21	3.04	2.82	2.75	2.76	2.66	2.80
Kingston, ,,	2.88	3.14	3.38	3.56	3.50	3.54	3.23	3.36	3.24	3.04	2.85	2.84	2.79	2.72	2 9
Peterborough, ,,	.	.	,		.		١.		.						.
Toronto, ,,	2.91	3.53	3.45	3.63	3.52	3.21	3.46	3.22	3.14	2.92	2.69	2.79	2.74	2.84	3.0
Port Dover, ,,	2.90	3 · 27	3.48	3.62	3.55	3.52	3.41	3.16	3.07	2.91	2.73	2.84	2.77	2.86	3.1
Fort Stanley, "	2.94	3.12	3.20	3 63	3.57	3.52	3.40	3.16	3.04	2.88	2.76	2.85	2.79	2.98	3.1
Windsor, "		.	•									.			.
Granton, ,,	2.99			3.63			3.37	,		2.82	.		2.78	•	.
Stratford, ,,			.												
Goderich, "				.						.					
Kincardine, ,,	1.	-	.	-		į .				.					.
Saugeen, "	2.97	3.41	3.49	3.65	3.54	3.46	3.35	3.06	2.92	2.74	2.63	2.71	2.74	2.97	3.1
Stayner, "	2.90	3.35					3.33	3.10	į •	2.79	2.71		2.73	2-97	.
Little Current ,,	3.11			3.62			3.28			2.69			2.73		1 .
Fort Garry, Man	3.56	3.38	3.24	3.02	2.69	2.50	2.41	2.58	2.73	2.04	3 07	3.31	3:30	3.30	3.

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations.	11t	h Apr	il.	12t	h Apr	il.	13t	h Ap	ril.	14t	h Apr	il.	15t	h Apr	il.
Glace Bay, N.S.	25	°		30	.	•	21		•	31	.		37	°	
Sydney, ,,	26	30	22	30	31	24	22	24	12	32	36	31	36	39	33
Guysborough, ,,					.	.	. \	]	
Halifax, ,,	28	31	31	30	24	19	25	29	25	36	36	32	41	42	3
Charl'town, PEI.	24	30	27	30	23	22	22	32	25	29	46	34	35	41	3
Chatham, N.B.	2 5	35	28	19	23	16	20	38	31	36	55	36	43	54	4
Bathurst, ,,	27						23	٠,		35	.		40		
Father Point, Q.	28	28	2 3	10	24	13	20	22	21	24	40	39	48	41	39
Quebec, ,,	29	32	22	7	27	27	18	35	30	32	47	42	42	50	41
Montreal, ,,	30	31	20	15	31	25	27	39	30	39	45	43	46	50	37
Cornwall, Ont.						٠							. 1		
Ottawa, ,,	31	26	20	12	34	23	20	43	32	35	47	46	40	52	3'
Brockville, "	32	24	20	23	30	26	29	42	34	48	48	43	45	49	3
Kingston, ,,	32	27	20	19	36	28	31	36	37	37	49	41	43	51	3.
Peterborough, ,,										.	.				١٠.
Toronto, "	32	25	22	23	36	29	33	39	36	39	60	47	49	43	3:
Port Dover, "	36	29	22	21	33	26	31	50	42	43	50	48	44	48	3:
Port Stanley, "	35	29	21	21	33	29	33	44	44	41	49	42	48	43	3
Windsor, ,,											•				
Granton, ,,	29			22			33			48			45		١.
Stratford. ,,															
Goderich, "										.	•				١.
Kincardine, ,,	29	31	23	21	33	18	35	50	49	53	50	43	33	30	2
Saugeen, ,,	28	23	17	23	28	24	32	55	46	49	5 0	46	37	30	2
Stayner, ,,	31	24					39	44		47	58		45	29	
Little Current,,	15			25			40			42			32		
Fort Garry, Man.	5	28	20	22	43	38	40	3 9	33	22	32	23	18	29	30

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich ,,

0 43 p.m.

4 25 p.m. 10 50 p.m. 9 43 p.m. 4 08 a.m.

4 08 a.m. (of next day.)

Stations.	16	5th Ap	ril.	17	th Ap	ril.	18	8th Af	oril.	19	th Ap	ril,	20	th Ap	ril.
Glace Bay, N.S.	2.31	.	.	3.03			3.14		1.	3.29	.		3.05	.	1.
Sydney, "	2.33	2.49	2.71	3.04	3.24	3.24	3.19	3.23	3.31	3.26	2.37	2.98	3.09	3.12	3.06
Guysborough, ,,	2.34	.	.	3.10		.	3.17] .	1	3.25	•		3.12	.	} .
Halifax, "	2.45	2.68	2.91	3.18	3.24	3.53	3.19	3.26	3.35	3 · 31	3.07	3.13	3.18	3.09	2.09
Charl town, PEI.	2.38	2.63	2.89	3.18	3.58	3.24	3.22	3.27	3.28	3.22	2.97	3.04	3.20	3.16	2.99
Chatham, N.B.	2.48	2.71	2.98	3.31	3.25	3.25	3.32	3.23	3.25	3.14	3.00	3.17	3.32	3.09	2.98
Bathurst, ,,	2.51	.		3.25			3.27		.				3.25		
Father Point, Q.	2.63	2.88	3·10	3.32	3.21	3.21	3.26	3.18	3.09	2.88	3.01	3.18	3.35	3.00	2.87
Quebec, ,,	2.86	2.99	3.21	3.37	3.17	3.18	3.34	3.19	3.14	3.05	3.15	3.26	3.28	2.93	2.73
Montreal, ,,	3.08	3.16	3.29	3.36	3.27	3.29	3.38	3.32	3.24	3.18	3.26	3.32	3.23	2.82	2.51
Cornwall, Ont.															.
Ottswa, "	3.17	2 23	3.30	3.36	3.27	3.30	3.36	3.29	3.23	3 23	3.30	3.34	3.17	2.72	2.49
Brockville, "	3.19	3.22	3.28	3.29	3.25	3 · 29	3.39	3.31	3 · 29	3.24	3 · 26	3.31	3.11	2.65	2.48
Kingston, "	3.20	3.26	3.31	3.29	3.29	3.33	3.43	3.38	3.27	3.33	3.30	3.31	3.09	2.60	2.56
Peterborough, ,,		.											١.		
Toronto, ,,	3.3●	3.25	3.27	3.19	3.53	3.30	3.42	3.29	3.24	3.33	3.26	3.17	 2·83	2.47	2.53
Port Dover, "	3.26	3·19	3.20	3.12	3.20	3.30	3.43	3.29	3.26	3.30	3.20	3 ·13	2.75	2.51	2.60
Port Stanley, ,,	3.28	3.18	3.15	3.11	3.19	3.32	3.42	3.27	3.27	3.31	3.18	3.11	2.70	2.52	2.64
Windsor, ,,				•	•						.				
Granton, "	3.29			3.14			3.40			3.32			2.72		.
Stratford, ,,															١.
Goderich, ,,												. ,			}.
Kincardine, ,,				.											
Sangeen, "	3 32	3.30	3.26	3.23	3.21	3.29	3.36	3·18	3.22	3.38	3.59	3·19	2.80	2.50	2.69
Stayner, ,,	3.31	3.25		3.20	3.23		3.33	3.23				,	2.85	2.49	
Little Current,,	3.33	. ;		3.28			3.21			3.36	.	• [2.91		
Fort Garry, Man.	3.31	3.12	3·18	3.04	3·10	3.15	3.31	3.34	3.39	3.35	3.27	3.24	3.25	3.11	3.09
				1		6				<u> </u>					

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations.	16t	h Apr	il.	17t	h A pr	il.	186	h А рг	ril.	19t	h Apı	il.	201	h Apr	il.
Glace Bay, N.S.	45	•	•	30	0	•	36	0	•	43		°	34	.	•
Sydney, "	42	37	38	32	32	29	36	36	25	43	39	34	36	31	27
Guysborough, ,,								. !	.	. 1		.	• [.	
Halifax, ,,	44	42	35	35	42	31	33	44	32	40	38	33	38	38	32
Charl'town, PEI.	40	40	3 3	29	32	30	35	40	32	37	41	37	32	31	30
Chatham, N.B.	44	38	32	30	40	31	37	45	27	38	48	35	33	39	31
Bathurst, ,,	39			32			35			.		.	34		
Father Point, Q.	28	37	22	23	27	25	29	40	32	40	44	35	25	31	25
Quebec, ,,	27	38	26	28	35	28	25	42	3 2	36	39	32	31	31	31
Montreal. ,,	28	41	32	30	33	29	34	45	37	40	50	37	31	33	33
Cornwall Ont.		,					. !								
Ottawa, ,,	24	39	31	31	36	27	31	45	31	39	48	34	34	32	33
Brockville, ,,	34	39	30	31	31	28	27	39	32	44	49	37	35	35	36
Kingston, "	28	39	32	33	31	32	31	35	36	39	46	38	35	39	38
Peterborough, ,,							~1						. 1		
Toronto, ,,	2 8	37	- 33	35	35	32	35	37	30	38	46	41	36	42	39
Port Dover, ,	30	39	34	30	33	31	31	44	34	37	52	42	38	46	43
Port Stanley, ,,	32	39	35	34	40	26	32	42	34	38	48	43	39	47	41
Windsor, ,,	,														
Granton, ,,	30			33			29			36			34		
Stratford, ,,															
Goderich, "															
Kincardine, "	30	33	30	34	38	29	34	52	37	32	38	37	36	38	32
Saugeen, ,.	27	32	27	35	41	25	35	51	41	32	40	34	33	41	31
Stayner, ,,	2 9	29		37	37		41	34					34	38	
Little Current ,,	26			35			39			30			35		
Fort Garry, Man.	29	44	35	30	22	15	10	19	10	16	31	28	1 22	36	30

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 nm

Greenwich

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

Stations.	21:	st Apr	il.	221	nd Ap	ril.	23	rd Ap	ril.	24	th Ap	ril.	25	th A p	ril.
Glace Bay, N.S.	2.77	٠.		2.58			2.94			2.91			3.07		
Sydney, ,,	2.79	2.56	2.59	2.62	2.66	2.82	2.97	3.02	3.00	2.96	2.93	3.05	3.13	3.17	3.18
Guysborough, "	2.67			2.58			2.99			2.92			3.12		
Halifax, "	2.57	2.51	2.59	2.63	2.77	2.92	3.03	3.01	2.95	2.94	2.99	3.09	3.18	3.15	3.12
'Charl'town, PEI.	2.70	2.61	2.61	2.63	2.62	2.90	3.02	3.02	2.97	2.95	2-97	3.06	3.17	3.20	3.16
Chatham, N.B.	2.76	2.61	2.64	2.73	2.79	2.96	3.04	2.94	2.95	2.99	2.93	3.09	3.22	3.12	3.13
Bathurst, ,,	2.75			2.69			3.01			2.95			3.22		:
Father Point, Q.	2.66	2.60	2.66	2.80	2.86	2.96	3.04	2.81	2.88	2.88	3.00	3.14	3.27	3.14	3.13
Quebec, "	2.49	2.57	2.69	2.83	2.81	3:00	3.03	2.87	2.85	2.95	3.05	3.14	3.25	3.10	2.92
Montreal, ,,	2.52	2.81	2.92	2.94	2.98	3.02	2.94	2.86	2.91	3.08	3.18	3.22	3.26	3.02	2.81
Cornwall, Ont.			.					.			j .] .	
Ottawa, "	2.65	2.89	3.06	2.96	2.97	2.96	2.95	2.89	2.92	3.13	3.20	3.23	3.24	2.98	2.84
Brockville, "	2.69	2.96	3.01	3.01	2.98	3.00	2.91	2.88	2.93	3.13	3.21	3.25	3.19	2.95	2.82
Kingston, "	2.73	3.01	3.03	3.06	3.01	3.02	2.92	2.88	2.96	3.14	3.21	3.25	3.16	2.96	2.89
Peterborough, ,.			.].											
Toronto, "	2.87	3.02	3.03	3.09	2.98	2.96	2.89	2.87	3.04	3.50	3.20	3.20	3.07	2.86	2.76
Port Dover, ,,	2.98	3.06	3.02	3.10	3.01	2.97	2.89	2.90	3.06	3.50	3.19	3.17	3.00	2.77	2.72
Port Stanley, ,,	3.01	3.08	3.03	3.09	3.00	2.96	2.89	2.91	3.07	3.21	3.19	3.16	2.95	2.78	2.78
Windsor, "] .					
Granton, "	3.01			3.10	\ . ·		2.92		ļ .	3.50			2.96		
Stratford, ,,				· ·						.	(·				,
Goderich, "									.	ļ.			ļ.		
Kimcardine, "					ļ.	·		. •					,		.
Sampeen, "	3.01	3.03	3.06	3.13	2.97	2.99	2.96	3.03	3.13	3.23	3.18	3.16	3.05	2.89	2.90
Stagmer, "	2.97	3.00		3.04	2.99		2.93	2.96		3.23	3.18		3.01	2.82	
Little Current ,,	2.96			2.99		.	3.02			3.18			3.07		
Fort Garry, Man.	3.07	3.21	3.26	3.34	3.22	3.16	3.08	2.87	2.75	2.29	2.65	2.80	3.08	3.19	3.28

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p. m. 9 43 p. m.

Stations.	21	st Apr	il.	22n	d Apr	il.	23r	d Apr	il.	24t	h Apr	il.	25tl	Apri	il
Glace Bay, N.S.	29	.	9	30			35	.	•	32	.		42	.	•
Sydney, ,,	29	30	27	32	31	26	36	34	21	36	34	26	42	38	28
Guysborough, ,,	.	.	.] :	
Halifax, ,,	31	34	32	38	38	27	38	41	34	40	42	33	40	42	34
Charl'town PEI.	29	31	30	30	31	28	30	39	29	33	44	36	36	41	31
Chatham, N.B.	29	29	27	31	39	30	32	40	25	35	37	32	36	49	30
Bathurst, ,,	3 0	.		33			34			33			36		
Father Point, Q.	29	30	26	30	32	2 8	27	31	31	26	37	32	29	36	33
Quebec, "	32	37	32	30	36	25	25	35	30	33	35	29	29	38	35
Montreal, ,,	33	37	32	33	42	35	35	40	33	30	42	35	39	46	37
Cornwall, Ont.															
Ottawa, "	32	36	30	30	43	35	33	41	33	30	42	30	31	44	38
Brockville, "	34	36	31	43	42	36	37	37	31	37	34	30	38	43	39
Kingston, ,,	35	36	33	36	40	32	35	42	35	32	37	30	34	42	35
Peterborough ,,												١.			١.
Toronto, "	35	43	39	36	43	37	37	45	30	32	40	30	35	36	 33
Port Dover, ,,	34	41	38	34	45	36	36	42	33	29	45	31	34	38	32
Port Stanley, ,,	33	40	38	35	43	35	35	44	28	31	43	33	35	37	33
Windsor, ,,		.							.			١.			١.
Granton, ,,	31	<u> </u>		35			36			31		١.	34		
Stratford, ,,									!	١.		١.			١.
Goderich, "	١.				١.] .					١.
Kincardine, "	32	37	34	36	42	34	29	32	28	31	37	32	30	42	37
Saugeen, ,,	31	39	29	37	38	33	28	30	25	30	34	30	34	48	38
Stayner, "	32	38		37	41		34	33		35	39		40	38	1
Little Current,,	28			32			24	.	١.	31		١.	33		.
Fort Garry, Man.	28	26	18	15	30	22	24	42	34	36	41	37	25	30	20

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

43 pm.

9 43 p.m.

4 08 a.m. (of next day.)

Stations.	26t	h Арі	ril.	27t	h Apı	ril.	28t	h Ap	ril.	29t	h Ap	ril.	30t	h Ар	ril.
Glace Bay, N.S.	2.93			2·14			2.53			3.13			2.59		
Sydney, "	2.99	2.63	2.36	2·15	2.32	2.44	2.55	2.78	2.98	3·17	3.19	3.08	2.64	2.57	2.62
Guysborough ,,	2.86			2.08			2.60			3.13			2.47		١.
Halifax, "	2.71	2.25	2.14	2·20	2.53	2.59	2.70	2.85	3.04	3.15	2.94	2.77	2.45	2.54	2.48
Charl'town,PEI.	2.85	2.46	2.32	2.33	2.50	2.53	2.65	2.81	2.98	3.13	3.00	2.80	2 · 39	2.40	2.39
Chatham, N.B.	2.92	2.69	2.59	2.61	2.54	2.63	2.71	2.82	2.98	3.11	2.94	2.68	2.31	2.22	2 27
Bathurst, ,,				2.62			2.73	١.		3.13			3.23		
Father Point, Q.	2.90	2.72	2.72	2.74	2.61	2.60	2.84	2.88	3.00	3.09	2.93	2.58	2.11	1.97	1.99
Quebec, ,,	2.75	2.68	2.72	2.81	2.73	2 85	2.96	2.89	2.96	3.03	2.81	2.63	2.15	1.98	2.11
Montreal, "	2.65	2.70	2.82	2.94	2.94	3.04	3.11	3.04	3.02	3.03	2.85	2.69	2.45	2.38	2.41
Cornwall, Ont.															.
Ottawa, "	2.70	2.72	2.86	3.06	3.05	3.16	3.17	3 06	3.14	3.06	2.91	2.84	2.65	2.51	2.53
Brockville, ,,	2.65	2.76	2.88	3.07	3.08	3.13	3 18	3 . 09	3.09	3.04	2.93	2.86	2.71	2.56	2.59
Kingston, ,,	2.68	2.81	2.89	3.09	3.09	3.15	3.19	3.10	3.09	3.06	2.94	2.90	2.77	2.60	2.65
Peterborough ,,												١.			.
Toronto, ,,	2.79	2.89	3.02	3.17	3.18	3.50	3.20	3.10	3.12	3.13	3.05	2-29	2.91	2.70	2.72
Port Pover, "	2.85	2.98	3.10	3.22	3.18	3.19	3.24	3.10	3.13	3.12	3.08	3.16	2.98	2.80	2.77
Port Stanley, "	2 87	3.04	3.17	3.30	3.20	3.20	3.14	3.10	3.16	3.17	3.12	3.12	2.94	2.85	2.82
Windsor, ,,	1 .	} .		┨ .								.	.		
Granton, "	2.88	1.		3.27	\	.	3.16		.	3.21	·		2.99		.
Stratford, , ,,				1 .						.		1.			
Goderich, "			
Kincardine, "			1.
Saugeen, ,,	2.85	3.01	3.12	3.30	3 26	3.22	3.23	3.19	3.21	3.23	3.17	3.02	2.93	2 77	2.74
Stayner ,,	.	.		3.25	3.24		3.21	3.20		3.17	3.09	.	2.85	2.67	
Little Current ,,	2 85	i .		3.32			3 31	+ .		3.29	┤ .	.	2.94	.	.
Fort Garry, Mar	ı. 3·24	3.21	3.22	3.25	3.26	3.28	3.33	3.15	3.03	2.93	2.80	2.83	2.85	2.78	2.81

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich ,,

0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations.	26t	h Apı	il.	27t	h Apı	ril.	2 8t	h Api	ril.	29t	h Ap	ril.	30t	h Apı	ril.
lace Bay, "	31	.	.0	29		0	38	0		46		•	43.	°	•
Bydney, ,,	33	30	30	30	29	28	38	37	22	44	41	37	48	39	32
Suysborough ,,	.]			.]	.					.]			.		
Halifax, ,,	33	32	32	32	36	32	42	47	35	37	42	42	41	36	33
Charl'town, PEI.	34	30	30	29	35	30	36	46	33	35	39	42	48	39	34
Ohatham, N.B.	32	30	27	34	44	37	38	47	32	38	35	41	50	38	31
Bathurst, ,,			.	34			38			40			50		
Father Point, Q.	27	25	21	29	40	37	29	35	31	39	34	27	38	40	41
Quebec, ,,	35	35	33	36	43	32	25	39	35	32	32	31	33	33	30
Montreal, ,,	32	34	34	37	42	34	31	42	34	31	31	29	29	38	36
Cornwall, Ont.				. !											
Ottawa, ,,	32	45	34	29	45	33	26	42	33	28	38	34	31	42	36
Brockville, "	31	37	34	36	39	34	35	38	31	30	35	34	32	45	36
Kingston, ,,	32	41	35	33	38	32	30	38	31	30	37	31	32	47	37
Peterborough ,,									 .			.			 .
Toronto, ,,	36	40	34	29	41	30	32	38	32	31	35	33	36	48	34
Port Dover, "	33	36	32	31	45	34	32	37	32	29	39	29	32	37	36
Port Stanley, .,	36	36	30	31	43	31	33	43	30	31	39	24	35	37	36
Windsor, ,,] .] .	!] .							
Granton, ,,	34			30			31		j .	30		١.	34		١.
Stratford, ,,					 •	.	١.	.	¦ .	.		١.			l .
Goderich, ,,															١.
Kincardine, "	32	38	36	31	32	28	32	35	32	30	32	31	30	36	38
Baugeen, ,,	35	34	30	26	33	28	30	34	28	28	32	27	83	38	32
Stayner, ,,				28	30] .	30	32		27	33		38	41	١.
Little Current,,	33	į .		23			26			27			34	-	[
Fort Garry, Man.		•	l	1	46	1 38	ļ	53	1	39	i i	1		i '	ו י

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

Greenwich "

0 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

Stations,	1	st Ma	ý.	2:	nd Ma	y .	3	rd Ma	y.	4	th Ma	у.	5	th Ma	y .
Glace Bay, N.S.	2 52			2.44	.		2 · 42			2 58			2 67		
Bydney, ,,	2.54	2 47	2.46	2.47	2.55	2.57	2.47	2.53	2.59	2:61	2:63	2:70	2.70	2.69	2.70
Guysborough, ,,	2.45	1 . ·		2.45			2.45			2.69	.	.	2.70		١.
Halifar, ,,	2.42	2.37	2.43	2.20	2.50	2.50	2.57	2.73	2.80	2.82	2.69	2.76	2.76	2.61	2.5
Charl'town, PEI.	2.38	2-37	2.41	2.47	2 49	2.54	2.59	2.71	2.74	2.77	2.72	2.76	2.73	2.64	2.6
Chatham, N.B.	2·29	2.33	2.40	2.50	2.48	2.61	2.75	2.83	2.86	2.90	2.74	2.77	2.78	2.61	2.6
Bathurst, ,,	2·21			2.51				ļ.	٠.	2.83	•		2.71		
Father Point, Q.	2.05	2.22	2.38	2.51	2.59	2.78	2.86	2.91	2 93	2.95	2.84	2.81	2.79	2.64	2:6
Quebec, ,,	2 ·13	2.27	2·41	2.49	2.72	2.79	2.95	2 90	2.96	3.03	2.81	2.85	2.85	2.61	2.0
Montreal, .,	2 ·37	2.42	2.54		2.79	2.92	3.06	3.07	3.10	3.09	2.93	2.95	2.94	2.73	2:7
Cornwall, Ont.	2.42			2.65			3.09			3.13			2.92		ļ
Ottawa, ,	2·46	2.47	2.59	2.69	2.83	3.05	3.12	3.12	3.12	3.17	2.92	2.98	2.97	2.77	2.7
Brockville, ,	2.60	2.55	2 ·69	2.78	2.95	8.04	3 · 21	3.20	3.24	3.50	3.05	3.03	2.99	2.83	2.8
Kingston, "	2.60	2.49	2.62	2.74	2.94	3.05	3.18	3.19	3.18	3.14	3.04	2.96	2.95	2.80	2:8
Peterborough, ,,										3·10			2.93		
Toronto. "	2.68	2.58	2.65	2.74	2.80	3.04	3.21	3.50	3.18	3.12	2.99	2.94	2.95	2.81	2.8
Port Dover, ,,	2.77	2.68	2.70	2.72	2.87	3.04	3.20	3.17	3.12	3.07	2.94	2.94	2.90	2.83	2.8
Port Stanley, "	2·81	2 69	2.74	2.74	2.89	3.07	3.19	3 · 16	3.11	3.02	2.94	2.95	2.92	2.87	2.8
Windsor, ,,							3.20			3.02			2.97		.
Granton, ,,	2.80			2.77			3.20		} .	3.11			2.95		.
Stratford, ,,	2.80			2.79				.		3.08			2.98		.
Goderich, ,,) .		3.17			3.07			2.96	.	.
Kincardine, ,,				.											1
Sangeen, ,,	2.75	2.69	2.68	2.79	2.96	3.09	3.26	3.25	3.21	3.08	2.99	2.98	3.00	2.94	2.8
Stayner, ,,	2.73	2.63		2.80	2.97					3.11	3.30		2.97	2.82	
Little Current .,	2.69			2.84			3.28			3.22			3.06		.
Fort Garry, Man.	2 . 87	2.82	2.95	3.11	3.09	3.25	3.47	3.40	3 738	3.40	3.26	3.20	3.19	3.11	3.0

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations.	1	st Ma	y •	2:	nd Ma	y.	3	rd Ma	y.	4	th Ma	y .	5	th Ma	у.
Glace Bay, N.S.	° 41	°	,	° 40	0	9	32	•	° .	45	0	i i	42		1 :
Sydney, ,	45	40	36	36	37	32	32	37	38	48	41	34	46	43	32
Guysborough, ,,													. i		
Halifax, ,,	42	41	34	43	43	36	41	43	41	52	57	42	45	51	39
Charl'town, PEI.	36	40	36	35	48	35	33	39	43	44	41	34	.39	48	34
Chatham, N.B.	32	36	32	34	36	33	3 8	52	44	47	.50	37	38	51	30
Bathurst, ,,	33			33					, ,	46			39		
Father Point, Q.	34	36	38	37	38	37	38	43	42	29	:48	46	.40	44	41
Quebec, ,,	29	34	34	36	38	35	42	55	44	42	-52	.38	35	48	.38
Montreal, ,,	32	40	32		45	41	45	60	51	48	61	44	42	52	45
Cornwall, Ont.	36			34			47			51	.		. 47		
Ottawa, ,,	33	40	32	32	46	37	.44	62	48	43	62	47	41	57	38
Brockville,	36	44	33	36	42	35	48	59	42	46	.59	.45	40	54	43
Kingston, ,,	37	48	36	32	37	32	44	49	38	46	56	48	45	56	41
Peterborough, ,,										45			48		! .
Poronto, ,,	39	50	42	38	46	.38.	44:	53	40	44	.48:	44	.50	54;	48
Port Dover, "	. 36	53	40	38	49:	34:	3 8.	62	47	42	48	44;	46	53	45
Port Stanley, ,,	36	56	36	39	44	31	41	.51	48	45	, 5 0;	44:	.46;	.51	41
Windsor, ,,			•				43			46			.45		
Granton, ,,	36			40			43			44	.		. 4 8		
Stratford, ,,	35			36						43			45		
Goderich, "							50			45		. 1	54		
Kincardine, ,,	34	44	36	35	36	32	43	47	43	47	58	38	47	48:	36
Saugeen, ,,	34	42	35	35	40	31	38	44	40	46:	58	37	49	45	35
Stayner, ,,	42	42		34	35					47	48		48	53	
Little Current ,,	35			32			41			42	.		41		
Fort Garry, Man.	43	63	47	35	53	42	35	55.	44	37	61	49:	.42	.62	-47

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25¶p. m. 9 43]p. m.

Greenwich " 0 43 p. m.

10 50 p. m. 4 08 a. m. (of next day.)

Stations.	6t	h Ma	у.	7t	h Ма <u>у</u>	7.	81	h Ma	у.	91	th Ma	у.	10	h Ma	y.
Flace Bay, N.S.	2.23			2.94			3.02			2.86	,		2.71		
Sydney, ,,	2.56	2.76	2.90	2.95	2.95	3.04	3.06	2.96	2.94	2.90	2.84	2.79	2.72	2·86	3.0
łuysborough, "	2.53			2.90	,		3.00	 •		2.88			2.70		
Halifax, ,,	2,28	2.71	2.82	2.90	2.93	3.01	3.00	2.91	2.93	2.96	2.84	2.76	2.78	2.88	3.0
Charl'town, PEI.	2.64	2.70	2.82	2.89	2.92	2.91	2.92	2.91	2.92	2.92	2.91	2.89	2.75	2.93	2.9
Chatham, N.B.	2.70	2.69	2.84	2.95	2.84	2.93	2.99	2.89	2.89	2.97	2.72	2.70	2 84	3.04	3.1
Bathurst, ,,	2 65		l .	2.93			3.00			2.89					
Father Point, Q.	2.72	2.78	2.83	2.92	2.90	2.90	2.88	2.87	2.89	2.84	2.69	2.71	2.89	3.04	3.1
Quebec, ,,	2.76	2.69	2.89	2.95	2.83	2.91	2.85	2.80	2.84	2.83	2.61	2.79	2.95	3.08	3.1
Montreal,	2.85	2.85	2.96	3.04	2.95	2.93	2.89	2.91	2.97	2.82	2.67	2.81	3.02	3.12	3.2
Cornwall, Ont.	2.83			3.02			2.87			2.80			2.98		
Ottawa, "	2.88	2.95	3.06	3.02	3.02	2.89	2.92	2.94	2.97	2.86	2.65	2.83	3.04	1	3.1
Brockville, ,,	2.95	3.00	3.05	3.17	3.08	3.05	3.01	3.04	3.03	2.88	2.79	2.80	3.04	3.08	3.1
Kingston, "	2.88	2.90	3.04	3.12	3.08	3.01	2.96	2.98	2.96	2.79	2.73	2.82	2.95	3.01	3.0
Peterborough, ,,	2.85	.		3.10		.	2.93			2.69	.	.			
Toronto, "	2.85	2.95	3.05	3.12	3.04	3.02	2.97	2.96	2.91	2.80	2.74	2.84	2.96	2.92	3.0
Port Dover, ,,	2.86	2.92	3.07	3.17	3.11	3.02	2.98	2.94	2.93	2.88	2.81	2.92	3.03	3.00	3.0
Port Stanley, ,,	2.88	2.98	3.10	3.18	3.12	3.04	3.01	2.96	2.95	2 96	2.89	2.94	3.02	3.00	3.0
Windsor, ,,	2.97			3.51		.	3.02			2.97			3.10	.	
Granton, "	2.90	.		3.17			3.00			2.86			2.97		
Stratford, "	2.92			3.19			3.02		 • .	2.86	.				
Goderich, "	2.96			3.19			3.00			2.84	•	.	3.07		
Kincardine, "			Ì
Saugeen, "	2.98	3.03	3.07	3.17	3.05	2.96	2.99	2.96	2.80	2.70	2.68	2.84	2.88	2.92	2.
Stayner, "	2.93	3.04		3.11	3.02	.	2.98	2.91		2.69	2.67				
Little Current,,,	3.01			3.12			3.01		.	2.63	.	.	2.89		
Fort Garry, Man	3.13	3.05	2.99	2.96	2.74	2.67	2.49	2.29	2.25	2.32	2.21	2.56	2.59	2.48	2.

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m. 4 25 p. m. 9 43 p. m.

Stations,	6t	h М ау	7 .	7t	h May	7.	8	th Ma	y.	94	th Ma	у.	10	th Ma	у,
Glace Bay, N.S.	° 35	°		9 45		° .	° 46	°	•	° 41	0		41	Q	· .
Sydney, ,,	38	38	26	48	47	36	51	40	35	50	45	36	40	35	32
Guysborough, ,,				.											
Halifax, ,,	45	50	36	41	46	34	42	45	36	50	44	37	43	52	38
Charl'town, PEI.	39	45	34	38	44	40	41	48	40	44	48	40	42	36	34
Chatham, N.B.	40	49	29	39	52	33	41	48	35	41	51	40	43	43	12
Bathurst, ,,	37			36			37			39					
Father Point, Q.	31	28	23	32	35	30	40	41	37	41	40	47	37	49	46
Quebec, "	33	46	30	34	44	35	33	43	33	32	37	37	41	45	39
Montreal, ,,	33	42	34	38	50	39	38	51	43	42	48	43	44	45	41
Cornwall, Ont.	34			45			44			43			47		
Ottawa, ,,	32	41	32	36	53	45	42	56	46	42	57	52	50	55	45
Brockville, ,,	35	41	33	45	44	40	51	55	47	44	62	57	45	55	44
Kingston, ,	37	45	33	38	42	41	43	50	41	48	67	61	53	58	56
Peterborough, ,,	40			38			49			70				.	
Toronto, ,,	43	40	32	36	49	43	47	57	46	56	72	64	61	76	66
Port Dover, ,,	43	54	35	35	45	43	46	56	52	60	76	65	53	63	59
Port Stanley, ,,	42	48	32	40	46	39	45	60	47	50	58	52	54	63	54
Windsor, .,	47			41	,		55			68		. !	64		
Granton, ,,	41	·		38			49			68			69	.	
Stratford, ,,	40		,	34			45			65					
Goderich, ,,	43			39			49			62			64		
Kincardine, ,.	35	37	28	35	46	48	46	55	59	66	79	62	60	75	65
Saugeen, ,,	35	36	30	38	45	45	44	59	59	66	75	60	67	6ħ	57
Stayner, ,,	35	33		40	41		45	46		72	78				
Little Current,,,	30			39		,	43			50	. 1		52		
Fort Garry, Man.	39	64	50	45	76	วัย	58	92	70	50	56	50	48	75	47

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

Greenwich "

0 43 p.m.

4 25 p.m. 9 43 p.m.

The Height of the Barcmeter=27 inches + the numbers in the Table.

Stations.	111	h Ma	y.	12t	h Ma	у.	136	h Ma	у.	141	h Ma	y.	151	h Ma	у.
Glace Bay, N.S	3.18			3.14	.		2.97		•	2.69			2.92		•
Sydney, "	3.50	3.23	3.23	3.18	3·11	3.11	3.01	2.84	2.74	2.72	2.77	2.85	2.92	3.14	3.25
Guysborough "	3.17			3·18			2.98		,	2.72			2.96		
Halifax, "	3.23	3.28	3.31	3.29	3.15	3.13	3.04	2·87	2.82	2.80	2.75	2.95	3:07	3.11	3.24
Charl'town, PEI.	3.22	3.29	3.29	3.28	3·16	3.10	3.01	2.81	2.77	2.77	2.81	2.93	3.06	3.20	3·27
Chatham, N.B.	3.36	3.26	3.30	3.32	3·10	3.06	3.03	2.71	2.76	2.84	2.86	2.96	3.15	3.14	3.29
Bathurst, ,,	3.34	ί.		3.30			2.94			2.80	,		3.12		,
Father Point, Q.	3.38	3.34	3.33	3.35	3.12	3.03	2.89	2.76	2.79	2.87	2.95	2.98	3.20	3.16	3.14
Quebec, ,,	3.38	3.31	3.34	3.32	3.11	3.06	2.95	2.79	2.81	2.98	3.04	3.12	3.21	3.05	2.99
Montreal, ,,	3-38	3.37	3.38	3.36	3.16	3.02	3.00	2.86	2.90	3.10	3.11	3.14	3.19	2.99	2.88
Cornwall, Ont.	3.34			3.32			2.97			3.10		.	3.12		
Ottawa, ,,	3.35	3.35	3.34	3.33	3.12	3.01	3.00	2.89	2.84	3.15	3.16	3.20	3.21	2.96	2.89
Brockville, ,,	3.38	3.37	3.40	3.37	3.19	3.13	3.10	2.99	3.01	3.21	3.21	3.27	3.22	2.99	2-95
Kingston, ,,	3.29	3.29	3.33	3.37	3.16	3.07	3.10	2.99	2.98	3.17	3.18	3.19	3.17	2.93	2.88
Peterborough ,,	3.30] ! ·	3.21			3.06	.	ļ .	3.18		.	3.06	.	
Toronto, ,,	3.28	3.25	3.23	3.23	3.10	3.06	3.06	2.96	3.07	3.17	3.13	3.14	3.02	2.87	2.79
Port Dover, ,,	3.22	3.17	3.19	3.21	3.05	3.09	3.10	3.01	3.06	3.16	3.11	3.09	3.01	2.81	2.70
Port Stanley, "	3.18	3.16	3.17	3.19	3.07	3.06	3.17	2.99	3.07	3.17	3.11	3.09	3.00	2.82	2.7
Windsor, ,,	3.16	į .		3.17	١.	ļ.	3.13			3.26	1 :		3.00		
Granton, ,,	3.50		.	3.17		ļ.	3.08		.	3.19	.	┨.	3.01		
Stratford, "	3.53	.	.	3.19		.	3.09	.	•	3.21		.	3.04	1.	.
Goderich, ,,	3.14	1.		3.13			3.07			3.21		.	3.00] .
Kincardine, "	.								.				.		
Saugeen, ,,	3.12	3.15	3.12	3.10	2.96	3.06	3.10	3.11	3.18	3.29	3.14	3.09	3.04	2.88	2.7
Stayner, ,,	3.22	3.20	.	3.15	2.93		3.03	3.05] .	3.20	3.16	ļ.	2.97	2.82	.
Little Current ,,	3· 2 2		.	3.18	.		3.06	.		3.30	.		3.09		.
Fort Garry, Man	1. 2.66	2.74	2.95	3.09	3.11	3.22	3 34	3.20	3.19	3.18	3.02	3.09	3.12	3.08	3.1

Table II .- Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m. 9 43 p.m.

Greenwich "

0 43 p.m.

Stations.	11t	h Ma	у.	12t	h Ma	у.	13t	h Ma	у.	14t	h Ma	у.	15t	h Мау	7.
Glace Bay, N.S.	37	.	Ŷ.	°	9	٥	57	9	9	65	.	9	°	.	ç
Sydney, ,,	40	42	34	48	47	29	57	56	48	66	54	42	47	43	30
Guysborough, ,,	.]	.]	.]					 [. (
Halifax, ,,	46	51	38	53	62	47	62	55	46	58	69	49	54	62	3
Charl'town, PEI.	40	52	36	46	54	41	45	55	49	56	53	44	46	43	3
Chatham, N.B.	46	59	42	51	65	43	48	72	60	55	57	43	49	62	3
Bathurst, "	45	.		49	.		50	.		56			47	.	p
Father Point, Q.	39	49	44	43	45	48	51	53	46	44	42	40	38	55	4
Quebec, ,,	43	56	42	43	60	48	55	68	53	50	55	45	47	55	4
Montreal, ,,	47	59	49	51	64	55	52	77	61	53	69	. 59	51	67	6
Cornwall, Ont.	48			57			64			55			59		
Ottawa, ,,	47	60	50	48	71	56	58	75	61	50	62	58	49	70	6
Brockville, "	51	60	49	56	68	56	66	69	56	55	61	47	56	69	5
Kingston, ,	50	63	54	49	68	55	53	61	61	52	62	49	53	73	6
Peterborough, ,,	50			58			63			54			56		
Toronto, ,,	47	56	52	55	60	57	64	67	55	53	58	47	52	59	5
Port Dover, ,,	49	66	50	51	68	64	56	61	58	50	62	53	51	74 :	6
Port Stanley, ,,	54	57	54	55	63	59	62	63	57	49	59	47	57	70	6
Windsor, ,,	65			61			65			49			55		
Granton, ,,	50			59			65			47			55		
Stratford, ,,	50			57			59			44	•		51	.	
Goderich, "	55			65			65			51		. 1	57		
Kincardine, ,,	56	77	51	56	69	55	60	58	44	49	50	49	50	58	5
Saugeen, ,,	56	73	56	59	67	55	59	48	40	48	54	46	54	58	4
Stayner, ,,	53	58		60	73		64	57		51	50		50	57	
Little Current,,,	4 6			43			44			43			45		١.
Fort Garry, Man.	40	44	35	35	49	35	3 3	56	47	41	64	49	41	54	4

Table I.—Barometer at 32° Faht. and Reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day).

The Height of the Barometer 27 inches + the numbers in the Table.

Stations.		16	th Ma	y.	17	th Ma	y .	18	th Ma	у.	19	th May	y.
Glace Bay,	N.S.	3.26	•		2.89	•		2.98	• ,		2.99		
Sydney,	,,	3.31	3.24	3.18	2.90	2.80	2.85	2.96	3.00	3.00	3.02	2.95	2.94
Guysborough,	"	3.27			2.81			2.93			2.96		•
Halifax,	,,	3.28	3.16	2.99	2.80	2.80	2.87	2.95	2.94	2.93	3.02	2.84	2.92
Charlottetown, l	P. E.I .	3.28	3·15	2.97	2.74	2.79	2.86	2.95	2.94	2.94	2.94	2.81	2.88
Chatham,	,,	3.28	3.01	2.86	2.96	2.80	2.89	2.97	2.90	2.90	2.92	2.70	2.76
Bathurst,	, ,	3.21						2.93			2 [.] 91		
Father Point,	Q.	3.07	2.81	2.73	2.65	2.65	2.81	2.86	2.91	2.92	2.84	2.63	2.66
Queboc,	,,	2.94	2.73	2.62	2.59	2.68	2.76	2.87	2.78	2.83	2.73	2.74	2.77
Montreal,	,,	2.81	2.54	2.59	2.75	2.76	2.80	2.84	2.82	2.79	2.75	2.77	2.84
Cornwall,	Ont.	2.74			2.75			2.84			2.81	,	
Ottawa,	,,	2.76	2.55	2.52	2.78	2.78	2.85	2.89	2.94	2.86	2.82	2.84	2.86
Brockville,	,,	2.81	2.63	2.72	2.91	2.88	2.91	2.91	2.95	2.94	2.92	2.91	2:91
Kingston,	,,	2.79	2.62	2.75	2.89	2.85	2.83	2.85	2.93	2.91	2.92	2.89	2.91
Peterborough,	,,	2.70						2.89			2.95		
Toronto,	,,	2.63	2.66	2.81	2.86	2.74	2.83	2.89	2.95	2.99	3.01	2.88	2.86
Port Dover,	,,	2.63	2.77	2.87	2.87	2.77	2.88	2.92	3.04	3.04	3.05	2.93	2.88
Port Stanley,	,,	2.65	2.78	2.87	2.87	2.80	2.92	2.96	3.01	3.06	3.06	2.96	2.92
Windsor,	,,	2.72			2.87		١.	3.10			3.11		
Granton,	,,	2.60	.		2.87			3.00			3.07	! !	ļ .
Stratford,	,,	2.60				. •		2.99			3.08		
Goderich,	,,	2.62			2.79			3.02			3.07		
Kincardine,	"					.							
Saugeen,	,,	2.56	2.74	2.83	2.80	2.84	2.92	3.03	3.12	3.10	3.04	2.94	2.89
Stayner,	,,	2.24	2.70		•	.		2.95	2.96		2.99	2.85	
Little Current,	,,	2.69	.		2.82			3.08			3.02		
Fort Garry,	Man,	3.11	3.05	3.10	3.22	3.13	3.09	3.00	2.88	2.88	3.08	3.08	3.1

TABLE II .- Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

Stations,	ł	16	th Ma	у.	17	th Ma	y .	18	3th Ma	y.	19	9th Ms	y.
Glace Bay,	N.S.	45		l °	44	· .		46		· .	44		,
Sydney,	,,	52	48	38	41	59	48	53	55	46	48	43	50
Guysborough,	,,						١.	.					1.
Halifax,	,,	47	43	41	52	53	48	52	51	49	44	49	4.
Charlottetown, P	P.E.I.	46	48	41	51	54	49	51	66	48	56	57	52
Chatham,	N.B.	46	60	42	45	56	47	51	68	50	45	53	i 49
Bathurst,	,,	44					١.	42			42	١.	١.
Father Point,	Q.	52	44	43	54	44	42	45	49	47	39	38	41
Quebec,	,, }	45	45	44	47	57	47	47	48	45	41	43	40
Montreal,	,,	62 .	62	52	50	61	53	45	53	47	43	52	42
Cornwall,	Ont.	. 69			. 49			47	,	! •	45	١.	١.
Ottawa,	,,	62	68	53	58	58	50	45	50	49	44	61	4
Brockville,	,,	70	63	48	48	5 6	50	47	48	47	52	55	48
Kingston,	,,	58	53	45	49	52	49	46	50	42	49	52	47
Peterberough,	,,	62						41			50		١.
Toronto,	,,	56	54	46	51	52	44	42	49	38	50	61	48
Port Dover,	,,	57	51	50	49	52	44	42	44	41	42	55	50
Port Stanley,	,,	53	53	50	48	51	40	42	53	38	46	53	50
Windsor,	,,	51			51			45			48	1	
Granton,	,,	57			46			41	 -		46		١.
Stratford,	,,	58						42			41		١.
Goderich,	,,	47			47			42	.		46		
Kincardine,	,,	45	40	42	43	39	38	39	41	34	41	54	45
Saugeen,	,,	45	3 8	40	43	43	36	41	41	35	44	49	41
Stayner,	"	56	44					43	53		54	53	
Little Current,	,,	45			40			41			51	١.	
Fort Garry,	Man.	38	52	39	35	55	49	45	68	56	42	5ŏ	41

Table I.—Barometer at 32° Faht. and reduced to Sea level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich "

7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m.

10 50 p.m.

4 07 a.m. (of next day.)

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.		20	th May	y.	2	lst May	у.	22	nd Ma	y.	23	rd May	7.
Glace Bay,	N. S.	3.03			2.88			2.82		•	2.68		•
Sydney,	,,	3.05	3.07	2.94	2.91	2.99	2.97	2.86	2.70	2.70	2.71	2.70	2.83
Guysborough,	,,	3.01	.		2.92			2.74			2.71		•
Halifax,	,,	3.05	2.99	2.92	2-98	2.95	2.88	2.69	2.67	2.72	2.77	2.76	2.92
Charlottetown, l	P.E.I.	3.03	3.02	2.95	3.01	2.98	2.90	2.70	2.54	2.57	2.72	2.73	2:8
Chatham,	N. B.	3.00	2.94	3.00	3.09	2.93	2.87	2.74	2.53	2.60	2.73	2.76	2.90
Bathurst,	,,	2.94			3.01	•		2.67			2.70	.	
Father Point,	Q.	2·81	2.92	2.92	2.92	2.92	2.84	2.68	2.62	2.65	2.75	2.77	2:62
Quebec,	,,	2.88	2.83	2.83	2.89	2.77	2.81	2.69	2.64	2.74	2.90	2.75	2.91
Montreal,	,,	2 89	2.83	2.83	2.78	2.76	2.71	2.75	2.80	2.93	2.99	2.83	2:91
Cornwall,	Ont.	2 89			2 75		•	2 81			3 09		
Ottawa,	,,	2.88	2.86	2.85	2 80	2.80	2.83	2.85	2.88	3.05	3.03	2.85	2:94
Brockville,	,,	2.98	2.93	2.92	2.85	2.88	2.89	2.96	2.97	3.05	3.12	2.99	3.02
Kingston,	,,	2.93	2.88	2.84	2.83	2.75	2 ·87	2.93	2.85	3.03	3.07	2.96	3.00
Peterborough,	"	2.84			2.84			2.98			3.03		
Toronto,	,,	2.85	2.82	2.84	2.89	2.91	2.98	3.05	3.02	3.06	3.08	2.95	2.9
Port Dover,	**	2.85	2.81	2.86	2.91	2.94	3.01	3.06	3.02	3.09	3.11	2.98	2.9
Port Stanley,	,,	2.84	2.81	2.87	2.96	2.99	3.06	3.11	3.13	3.10	3·10	2.97	2.8
Windsor,	,,,	2 82		, •	3 06			3 18			3 09		
Granton,	,,	2 83			2 98			3 11			3 09		
Stratford,	"	2.86			3.00			3.12			3.08		
Goderich,	,,	2.84].	2.99			3.13			3.07		
Kincardine,	,,		.	.									
Saugeen,	,,	2.85	2.85	2.93	2.98	3.03	3.02	3.12	3.10	3.09	3.02	2.96	2.9
Stayner,	,,	2.81	2.86		2.95	2.93		3.06	3.03		2.99	2.92	
Little Current,	,,	2 83			3 04			3 11	.		3 C3		
Fort Garry,	Man.	3.20	3.08	3.10	3.10	3.01	2 93	2.79	2.66	2.70	2.75	2:65	2.6

1874.

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich "

7 22 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m.

Stations.		2	0th Ma	y.	2	lst Ma	у.	2:	2nd Ma	y.	2	3rd Ma	у.
Glace Bay,	N. S.	\$ 58	°		48	<u> </u>		ه 47		:	9 53		
Sydney,	"	59	58	44	55	51	45	52	57	43	51.	48	41
Guysborough,	,,						.	-					
Halifax,	,,	45	53	46	62	60	45	49	49	45	53	57	43
Charlottetown,	P.E.I.	51	62	47	50	54	48	50	52	48	49	49	46
Chatham,	N.B.	50	71	45	52	57	46	45	49	44	48	592	41
Bathurst,	,,	53		.	47			44			49		
Father Point,	Q.	44	56	45	41	40	40	42	46	39	40	41	36
Quebec,	,,	45	58	54	45	47	45	46	50	45	46	60	45
Montreal,	,,	52	56	50	50	52	4 6	45	55	45	53	69	56
Cornwall,	Ont.	52			51			45			57		
Ottawa,	,,	48	56	50	49	53	50	43	61	51	51	70	56
Brockville,	,,	50	55	47	48	. 51	49	45	59	48	48	60	55
Kingston,	,,	46	50	46	46	50	49	48	62	50	52	57	53
Peterborough,	,,	50			50			49			48		
Toronto,	,,	47	51	8	49	59	48	52	62	47	50	60	53
Port Dover,	,,	47	51	47	48	62	46	48	65	50	51	68	5
Port Stanley,	,, (47	52	47	47	5 6	43	51	6 6	48	51	62	53
Windsor,	,, [50			52			54	} .		60		
Granten,	,,	48			44			49			54		
Stratford,	,,	47			46			46	•		54		
Goderich,	,, }	48			50	j.		47			60		
Kincardine,	,, }	40	46	40	40	48	42	40	57	49	51	62	56
Saugeen,	,,	48	45	39	42	45	41 -	44	57	41	58	57	55
Stayner,	"]	48	46		47	58	.	50	63		63	57	
Little Current,	,,	44			47] , .	52			49		
Fort Garry,	Man.	40	66	51	52	64	54	52	65	53	53	69	62

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the most absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.		24	ith May	y.	2!	5th Ma	y.	26	oth Ma	y.	2	7th Ma	у.
Glace Bay,	N.S.	2.93			3.12			3.08			2.90		
Sydney,	,,	2.94	3.01	3.12	3.19	3.16	3.19	3.12	2.93	2.85	2.91	2.94	2.98
Guysborough,	,,	2.93	,	•	3.16			2.93			2.88		
Halifax,	,,	2.94	2.94	3.11	3.15	3.10	3.04	2.75	2.77	2.81	3.01	2.95	3.01
Charlottetown,	P.E.I.	2.96	3.02	3.10	3.16	3.06	3.05	2.82	2.75	2.78	2.90	2.93	2.98
Chatham,	N,B.	3.03	3.06	3.14	3.18	2.97	2.89	2.70	2.62	2.71	2.91	2.88	2.91
Bathurst,	,,			•				2.62			2.90		
Father Point,	Q.	2.95	2.98	2.99	2.99	2.75	2.68	2.56	2.56	2.73	2.96	2.82	2.82
Quebec,	,,	3.00	2.92	2.95	2.84	2.63	2.21	2.23	2.63	2.73	2.95	2.91	2.98
Montreal,	,,	3.03	2.93	2.88	2.69	2.36	2.37	2.49	2.70	2.81	3.02	2.94	2.97
Chatham,	Ont.	3.00			2.59			2.50			3.03		
Ottawa,	,,	3.03	2.89	2.84	2.61	2.28	2.34	2.41	2.73	2.91	3.02	2.94	3.00
Brockville,	,,	3.08	2.96	2.93	2.66	2.46	2.50	2.67	2.90	2.98	3·16	3.09	3.10
Kington,	,,	3.04	2.91	2.84	2.61	2.57	2.52	2.68	2.89	3.01	3.13	3.06	3.09
Peterborough,	,,				2.38		. •	2.63	,		3.06		١.
Toronto,	,,	2 96	2.82	2.72	2.34	2.46	2.58	2.75	2.89	3.00	3.10	3.01	3.02
Port Dover,	,,	2.95	2.82	2.71	2.37	2.57	2.78	2.91	2.94	3.05	3.13	3.05	3.03
Port Stanley,	,,	2.94	2.82	2.69	2.42	2.59	2.71	2.84	2.94	3.01	3.09	3.03	3.03
Windsor,	**	2.92			2.57			2.96		} .	3.10	l •	
Granton,	33	2.92			2·41	١.		2.86		.	3 08		
Stratford,	,,	•			2.41			2.86			3.11		
Goderich,	,,	2.89			2.39			2.89			3.07		
Kincardine,	,,	•											
Saugeen,	>,	2.91	2.77	2.54	2.29	2.51	2.64	2.83	2.96	2.99	3.02	3.04	3.05
Stayner,	,,				2:22	2.45		2.78	2.98		3.02	2.90	
Little Current,	>>	2.90			•2·21			2.82			3.02	. '	
Fort Garry,	Man.	2.60	2.70	2.85	2.99	2.83	2.73	2.59	2.41	2.46	2.68	2.81	2.90

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times.

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

Stations.		24	th May	·	25	th May		26	th May	•	27	th May	r.
Glace Bay,	N.S.	52	°		51			42		.	54	.	•
Bydney,	,,	56	48	31	55	55	37	43	44	46	54	66	48
Guysborough,	,,		
Halifax,	,,	54	60	43	51	48	45	52	53	45	53	65	50
Charlottetown, P	E.I.	48	50	41	48	63	50	51	58	52	55	65	56
Chatham,	N.B.	48	57	37	49	60	51	53	70	55	59	70	56
Bathurst,	"	.			•	.	.]	53			59		
Father Point,	Q.	38	46	45	43	46	55	42	46	44	41	53	58
Quebec,	,,	50	54	45	52	52	52	50	55	52	60	64	55
Montreal,	,,	52	63	54	58	63	57	49	54	55	52	68	60
Cornwall,	Ont.	51			59			50			55		١.
Ottawa,	"	53	70	59	53	64	52	49	59	53	57	70	57
Brockville,	,,	54	68	58	60	59	53	48	51	51	55	59	50
Kingston,	,,	53	71	60	55	52	50	47	49	50	54	57	52
Peterborough,	,,				59			47			58		
Toronto,	,,	56	61	57	55	59	52	49	57	48	56	62	5
Port Dover,	1,	54	71	57	63	65	55	49	60	50	50	67	5
Port Stanley,	,,	55	62	56	65	65	57	50	61	50	55	65	50
Windsor,	,,	64			63	١.		56		.	63		١.
Granton,	,,	59			62			45	١.	.	59		١.
Stratford,	,,	•			60			46	.	! !	54		١.
Goderich,	,,	64		.	54			44	١.	١.	62		ļ.
Kincardine,	,, .	66	65	63	52	47	44	41	52	43	56	81	6
Saugeen,	,,	59	65	64	55	45	42	40	46	42	59	70	6
Stayner,	,,				64	49		45	47		63	80	
Little Current,	,,	52		.	53			48			52		
Fort Garry,	Man.	56	65	54	49	68	60	60	85	66	56	57	1 5

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

Greenwich "

0 43 p.m.

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.		2	8th Ma	y.	29	th Ma	у.	30	th Ma	y.	3	lst Ma	y.
Glaco Bay,	N.S.	2.95			3.13			3.11			3.02		
Sydney,	,,	2.97	2.92	2.98	3.15	3.18	3.24	3.15	3.14	3.19	3.06	2.66	2.47
Guysborough,	"	2.98			3.14	.		3.14			3.00		
Halifax,	,,	3.05	2.99	3.06	3.15	3.17	3.21	3.18	3.10	3.11	2.96	2.63	2.51
Charlottetown, I	P.E.I.	2.98	2.92	3.08	3.22	3.22	3.25	3.18	3·16	3.14	2.91	2.52	2.42
Chatham, '	N.B.	2.97	2.87	3.09	3.33	3.17	3.53	3.24	3.11	3.08	2.81	2.57	2.55
Bathurst,	,,	2.91	. 1		3.24	. '		3.23					
Father Point,	Q	2.89	2 90	3.17	3.33	3.16	3.20	3.26	3.10	2.96	2.60	2.56	2.60
Quebec,	,,	2.97	2.82	3.13	3.26	3.17	3.19	3.16	2.97	2.87	2.63	2.55	2.56
Montreal,	,,	2.98	2.91	3.08	3.50	3.12	3.14	3.11	2.94	2.95	2.64	2.53	2.57
Cornwall,	Ont.	3.01			3.27			3.12			2.65		
Ottawa,	,,	3.02	2.99	3.07	3.20	3.07	3.11	3.04	2.89	2.82	2.67	2.57	2.58
Brockviile,	,,	3.11	3.03	3.08	3.26	3.18	3.20	3.18	3.02	2.97	2.81	2.69	2.65
Kingston,	,,	3·11	3.02	3.07	3.18	3.13	3.16	3.16	3.09	2.95	2.82	2.64	2.64
Peterborough,	,,	2.99			3.14			3.12					
Toronto,	,,	3.05	2.95	3.04	3.13	3.13	3.14	3.12	2.97	2.90	2.76	2.63	2.68
Port Dover,	,,	3.07	3.01	3.05	3.12	3.12	3.14	3.24	3.02	2.95	2.84	2.69	2.75
Port Stanley,	,,	3.04	2.99	3.05	3.14	3.11	3.13	3.12	3.01	2.94	2.83	2.67	2.79
Windsor,	1,	3.07		•	3.15			3.18			2.88		
Granton,	,,	3.04	•		3.14			3.13			2.80		
Stratford,	,,	3.06	•		3.16			3.15					! ! •
Goderich,	,,	3.02			3.14		•	3.12			2.81		
Kincardine,	,,										١.		
Saugeen,	,,	2.98	2.97	3.18	3.24	3.25	3.15	3.08	2.94	2.84	2.82	2.74	2.82
Stayner,	29	2.98	2.92		3.07	3.13		3.08	2.87	, .			
Little Current,	,,	3.08			3.21			3.09			2.77		
Fort Garry,	Man.	2.92	2.82	2.84	2.80	2.90	2.96	3.02	3.00	3.07	3.19	3.21	3.18

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich 0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations.		28	th May	·.	29	th May	7.	, 30	th May	y.	31	st May	7.
Glace Bay,	N.S.	67	°.	0	45	°.	· .	53	.	0	39	°.	0
Sydney,	,,	70	69	54	52	50	34	55	45	31	39	41	45
Guysborough,	"							.					
Halifax,	,,	66	64	54	60	57	45	49	62	50	45	61	53
Charlottetown, 1	1	58	69	52	49	56	42	54	50	42	43	56	54
Chatham,	N.B.	66	77	54	51	63	44	53	60	49	47	58 1	44
Bathurst,	,,	54		.	51		. 1	50					
Father Point.	Q.	51	53	48	44	50	53	44	51	49	56	47	42
Quebec,	,,	62	76	55	52	64	54	51	49	48	52	50	43
Montreal,	,,	63	84	59	57	70	62	59	75	57	69	64	59
Cornwall,	Ont.	70	.	.	60			64			75		
Ottawa,	,,	57	89	70	59	80	64	62	83	75	74	72	63
Brockville,	,,	63	73	65	60	73	61	64	74	65	70	65	60
Kingston,	,,	53	68	59	56	76	63	65	66	56	57	67	57
Peterborough,	,,	66		,	68			72	. !				
Toronto,	,,	61	69	64	67	66	: 59	67	76	60	72	77	61
Port Dover,	,,	56	70	64	62	78	63	65	73	64	61	75	61
Port Stanley,	,,	60	72	64	65	74	62	69	72	64	69	78	58
Windsor,	,,	71			74	l 1 .		71		\ { .	73		
Granton,	,,	70			70		١.	69			76		
Stratford,	,,	64			65			66				١.	
Goderich,	,,	70	١.	.	68		[64			65		
Kincardine,	"	69	78	56	62	66	51	55	80	72	60	59	45
Saugeen,	,,	70	65	53	61	59	53	66	75	69	57	59	44
Stayner,	,,	72	80		76	72	. 	74	85	١.			
Little Current,	,,	55		١.	56			64		١.	60		
Fort Garry,	Man.	46	60	52	54	67	57	50	65	53	48	60	49

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at vario us a tions in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m-

4 25 p.m.

10 50 p.m.

Greenwich ,,

0 43 p.m.

9 43 p.m.

The Height of the Barometer = 27 linches + the numbers in the Table.

Stations.	1	st Jun	е.	2r	ıd Jun	æ.	31	rd Jur	ıe.	4	th Jur	ie.	51	h Jun	ie.
Glace Bay, N.S.	2.38	.		2.76			3.12			3 20			3.51		
Sydney, ,,	2.41	2.46	2.57	2.79	2 99	3.11	3.14	3.08	3.18	3.29	3.26	3.26	3.24	3.12	3.02
Guysborough, "	2.36			2.76			3.11			3.26			3.20		
Halifax, ,,	2.38	2.52	2 60	2.83	3.02	3.13	3.15	3.15	3.27	3.31	3.23	3.19	3.17	3.01	2.98
Charl'town, PEI.	2.47	2.60	2.69	2.91	3.06	3.10	3.10	3.07	3.15	3.23	3.16	3.16	3.14	2.98	$2 \cdot 92$
Chatham, N.B.	2.61	2·7 3	2.80	3.00	2.99	3.04	3.07	2.99	3.08	3.10	3.11	3· 1 1	3.08	2.87	2.84
Bathurst, ,,	2.66			2.99			3.04			2.98			2.95		
Father Point, ,,	2.66	2.76	2.86	2.98	2.91	2.90	3.01	3.02	2.91	2.89	2.84	2.84	2.83	2.62	2.84
Quebec, ,,	2.63	2.75	2.89	2.99	2.83	2.97	3.10	2.99	2.97	2.95	2.88	2 91	2.85	2.74	2.86
Montreal, ,,	2.68	2.81	2.94	3.02	2.99	3.08	3.15	3.01	2.98	2.93	2.91	2 92	2.88	2.79	2.94
Cornwall, Ont.	2.69			3.06] .	3.10			2.88			2.82	l . •	•
Ottawa, ,,	2.73	2.83	2.94	3.14	3.04	3.10	3.11	3.00	2.91	2.93	2 88	2.92	2.84	2-81	2.94
Brockville, ,,	2.81	2.92	2.99	3.17	3.15	3.18	3.20	3.08	3.04	2.98	2.95	2.96	2.94	2.90	2.98
Kingston, "	2 80	2.91	3.00	3.14	3.13	3.15	3.17	3.11	3.01	2.96	2.93	2.94	2.91	2.88	2.98
Peterborough "	2.79			3.06			3.07			2.83			2.82		
Toronto, ,,	2.81	2.90	2.99	3.10	3.06	3.06	3.03	2.90	2.87	2.87	2.84	2.87	2.88	2.85	2.93
Port Dover, ,,	2.84	2.92	3.03	3.11	3.04	3.02	2.97	2.89	2.88	2.89	2.90	2.88	2.91	2 89	2.91
Port Stanley, "	2.87	2.93	3.03	3.08	3.01	2.99	2.97	2.88	2.85	2.88	2.82	2.89	2.89	2.89	2.92
Windsor, "	2.96			3.14			2.96			2.95			2.92		
Granton, "	2.93			3.11			2.96			3.04			2.88		
Stratford, ,.	2.92			3.14	.	.	2.99			2 91		.	2 88		.
Goderich, "	2.94			3.12	.		2.93		1 .	2.92			2.88		
Kincardine, "] .				.										
Saugeen, ,,	2.92	3.00	3.02	3.12	3.05	3.02	2.95	2.79	2.82	2.92	2.96	2.75	2.91	2.87	2.99
Stayner, "	2.91	2.92		3:10	3.02	.	2.95	2.79		2.88	2.80		2.78	2 92	
Little Current ,,	2.97			3.11		.	2.99			2.87			2.85		
Fort Garry, Man	3.15	2.95	2.92	2.88	2.77	2.79	2.74	2.64	2.61	2.59	2.71	2.86	2.99	2.91	2.93

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Green wich "

0 43 p.m.

4 25 p.m.

9 40 p.m.

Stations.	1s	June,	.	2nd	June	.	3 r c	l June	».	4tl	ı June	e.	5tl	June	٠.
Glace Bay, N.S.	° 40	.	•	38	°	•	48	°	•	60	°	•	° 63	.	• .
Sydney, "	41	40	36	37	38	29	54	64	49	58	58	51	62	60	56
Guysborough, ,, !	. !	.	
Halifax, ,,	53	44	40	45	52	38	56	59	47	52	59	50	54	51	47
Charl'town, PEI.	42	39	38	41	47	4 2	50	65	50	55	59	ŏ 5	57	59	56
Chatham, N.B.	41	42	40	48	60	41	57	77	62	60	58	57	60	72	61
Bathurst, ,,	42			45			50	.		59			63	.]	
Father Point, ,,	44	45	44	40	57	48	48	52	58	48	52	58	68	60	57
Quebec, ,,	43	48	43	52	67	52	57	72	63	56	59	60	69	74	63
Montreal, ,,	53	55	48	58	62	57	60	68	60	57	65	62	68	81	67
Cornwall, Ont.	53			60			66			62			78	.	
Ottawa, ,,	53	58	52	50	70	5 5	57	70	60	57	69	60	59	82	67
Brockville, "	5 3	55	52	60	61	52	56	64	56	59	69	63	75	75	68
Kingston, ,,	54	55	48	54	59	50	54	66	55	55	68	67	64	73	60
Peterborough ,,	54	.		62	.		54			60			75		
Toronto, ,,	57	61	53	57	62	52	54	61	57	62	73	57	58	80	67
Port Dover, ,,	54	63	50	50	73	58	58	67	58	64	70	62	64	72	70
Port Stanley, "	54	59	45	56	67	59	57	65	58	68	72	60	62	72	66
Windsor, ,,	59			55			60			68			70		
Granton, ,,	51			56			57			70			68		
Stratford, "	51			52	,		55			64		.	67		.
Goderich, "	53			57			62			65			69		
Kincardine, ,,	46	46	42	48	55	56	55	70	54	52	78	70	65	67	62
Saugeen, ,,	46	47	46	52	54	55	59	68	55	50	65	67	58	61	57
Stayner, ,,	49	59		58	60		60	68	١.	58	68		73	66	
Little Current ,,	50	.		58	١.		52			55			59		
Fort Garry, Man	. 43	70	57	53	69	57	56	70	61	53	60	47	46	68	53

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 5 a.m. 4 25 p.m. 9 43 p.m.

Greenwich "

0 43 p.m.

The Height of the Barometer = 27 inches + the numbers in the Tables.

Stations.	61	th Jun	ie.	71	h Jun	.e.	8t	h Jun	e,	91	h Jun	ie.	10	th Ju	ne.
Glace Bay, N.S.	2.98	.		3.01		2.71				2.25		} .	2.70] .	
Sydney, "	3.00	3 09	3.10	3.04	2.97	2.92	2.74	2.58	2.52	2.54	2.65	2.69	2.74	2.81	2.7
Guysborough, ,,	3.00			3.00			2.69	.		2.55			2.77		
Halifax, "	3.04	3.03	3.02	2.97	2.89	2.86	2.70	2.54	2.52	2.65	2.75	2.83	2.86	2.87	2.9
Charl'town, PEI.	3.03	2.99	3.04	3.01	2.93	2.96	2 62	2.57	2.58	2.71	2.80	2.83	2.87	2.90	2.8
Chatham, N.B.	3.07	3.03	3.03	3.04	2.95	2.85	2.62	2.57	2.69	2.88	2.89	2.92	2.93	2 90	2.9
Bathurst, ,,	3.09						2.62			2.87			2.92		.
Father Point, Q.	3.11	3.03	2.99	2.98	2.79	2.64	2.50	2.61	2.74	2.91	2.84	2.86	2.87	2.91	3.0
Quebec, ,,	3.06	2.93	2.89	2.91	2.62	2.54	2.46	2.60	2.75	2.89	2.73	2.74	2.90	3.01	3.14
Montreal, ,,	3.06	2.96	2.92	2.89	2.63	2.55	2.58	2.72	2.81	2.84	2.67	2.83	3.01	3.09	3.2
Cornwall, Ont.	3.01						2.66			2.89			3.01		.
Ottawa, "	3.04	2.94	2.91	2.83	2.61	2.42	2.62	2.74	2.73	2.79	2.70	2.86	3.05	3.13	3.2
Brockville, "	3.07	3.00	2.99	2.90	2.67	2.67	2.76	2.84	2.87	2.86	2.74	2.91	8.14	3.18	3.2
Kingston, "	3.03	2.96	2.95	2.88	2.68	2.69	2.78	2.82	2.83	2.82	2.73	2.90	3.10	3.13	3.1
Peterborough ,,	2.94] .		١.			2.82			2.73			3.09		١.
Toronto, "	2.94	2.89	2.88	2.80	2.60	2.70	2.84	2.79	2.80	2.78	2.80	2.93	3.07	3.08	3.1
Port Dover, "	2.96	2.87	2.86	2.80	2.60	2.73	2.88	2.78	2.84	2.81	2.80	2.94	3.06	3.05	3.0
Port Stanley, ,,	2.92	2.88	2.88	2.80	2.66	2.76	2.88	2.77	2.80	2.77	2.83	2.95	3.04	3.02	2.9
Windsor, ,,	2.94			2.79	.		2.93			2.82			3.10		
Granton, ,,	2.96			2.79	.		2.88		١.	2.77			3.06		١.
Stratford, ,,	2.97		ļ .				2.90		i	2.79			3.09		١.
Goderich, "	2.92			2.71			2.91	} .		2.78			3.11	,	
Kincardine, "					.										
Saugeen, ,,	2.92	2.87	2.82	2.70	2.65	2.81	2.98	2.88	2.76	2.77	2.98	3.01	3.13	3.10	3.1
Stayner, ,,	2.94	2.84] .				2.84	2.76] .	2.68	2.88		3.13	3.12	
Little Current ,,	2.97			2.71	.	.	2.86	.		2.75			3.21		
Fort Garry, Man.	2.91	2.78	2.73	2.69	2.64	2.73	2 84	2.92	3.04	3.18	3.15	3.20	3.25	3.17	2.9

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich

7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m.

S ations.	61	n Juu	10.	7	th[Ju	10.	8	th 'J ur	10.	191	h Jun	ie.	10	th Ju	ne.
Glace Bay, N.S.	58			. 56			o 51	ρ.	,	0 44	•		° 41		
Sydney, ,,	56	53	47	53	52	47	50	64	53	46	45	44	43	45	39
Guysborough, ,,	.							,							
Halifax, ,,	53	56	49	51	54	46	50	57	53	53	49	42	45	55	45
Charl'town, PEI.	65	55	51	56	64	56	57	64	49	42	41	39	40	47	47
Chatham, N.B.	63	65	49	58	57	52	. 54	52	43	44	44	40	45	53	49
Bathurst, ,,	61	.		,			50			45			47		
Father Point, Q.	48	62	49	48	45	44	42	44	48	41	40	38	47	47	43
Quebec, ,,	54	60	56	57	56	52	50	49	48	49	46	45	52	58	45
Montreal, ,,	59	65	63	58	71	60	64	65	59	59	59	51	60	63	51
Cornwall, Ont.	61	.					67			62			65		
Ottawa, .,	61	73	60	65	68	65	62	71	58	58	77	63	60	65	55
Brockville, "	62	64	60	63	79	68	69	64	57	68	71	66	62	64	55
Kingston, ,,	63	67	61	61	62	57	59	58	52	59	65	67	62	66	58
Peterborough, ,,	61						58			72			65		
Toronto, ,,	66	69	61	56	69	64	61	65	57	60	79	64	65	67	57
Port Dover, ,,	61	76	64	64	78	68	60	72	60	62	81	63	63	79	64
Port Stanley, ,,	66	73	62	67	73	66	60	72	61	68	76	60	64	72	/ 65
Windsor, ,,	66			69			63			74			60		[•
Granton, ,,	61			62	,		58		. 1	70			64	•	
Stratford, ,,	62	.			,		56			67			60		
Goderich, ,,	68			68			56			69			63		
Kincardine, ,,	56	68	65	60	69	52	50	60	62	54	59	51	56	58	57
Saugeen, ,,	63	67	63	64	70	51	49	60	54	65	53	50	55	59	54
Stayner, ,,	62	69					58	71		74	67		56	54	
Little Current ,,	65		. !	55			53		.	55			48		
Fort Garry, Man.	50	65	59	56	60	56	42	53	47	44	66	55	53	62	57

TABLE I.—Barometer at 32° Falt. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich ,, 7 25 a.m. 0 53 p.m. 4 25 p.m. 9 43 p.m 10 50 p.m.

4 08 a.m. (of next day.)

The Height of the Barometer=27 inches + the numbers in the Table.

Stations.	11:	th Jur	ie.	12	th Jur	ie.	13:	th Jur	ıe.	141	th J ui	ie.	15	th Jun	ie.
Glace Bay, N.S.	2.74			3.02			2.71	.		2.87			3.10	-	
Sydney, ,,	2.78	2.90	2.98	3.06	3.05	2.97	2.81	2.70	2.75	2.88	3.00	3·10	3.12	3.12	3.18
Guysborough. "	2·86			3.05			2.72			2.90			3.07	.	
Halifax, ,,	2.96	2.97	3.04	3 05	2.94	2.80	2.71	2.70	2.82	2.93	2.99	3.04	3.07	3.07	3 · 15
Charl'town, PEI.	2.95	2.99	3.06	3.08	2.99	2.86	2.70	2.71	2.83	2.97	3.01	3.05	3.08	3.09	3.14
Chatham, N.B.	3.05	2.97	3.03	3.08	2.90	2.82	2.75	2.72	2.90	3.05	3.02	3.05	3.11	3.02	3.11
Bathurst, "	3.02	•		3.06			2.70						3.09		
Father Point, Q.	3.13	3.03	3.00	2.96	2.77	2.74	2.60	2.76	2.93	2.96	2.89	2.97	3.08	3.02	3.03
Quebec, ,,	3.19	2.99	2.92	2.83	2.82	2.63	2.67	2.80	3.02	3.04	2.97	3 03	3.16	3.03	3.07
Montreal, ,,	3.23	3.03	2.86	2.71	2.66	2.72	2.85	2.97	3.07	3.15	3.11	3.12	3.23	3.15	3.13
Cornwall, Ont.	3.20			2.68			2.88	,		3.15			3.23		
Ottawa, ,,	3.23	2.97	2 85	2.70	2.63	2.74	2.89	2.99	3.09	3.23	3.08	3.06	3.25	3.14	3.11
Brockville, ,,	3.23	3.00	2.90	2.76	2.81	2.86	3 02	3.11	3.20	3.28	3.20	3.23	3.34	3.24	3.21
Kingston, ,,	3.15	2.93	2.82	2.76	2.77	2.82	3.00	3.09	3.19	3.28	3.19	3.23	3.30	3.22	3.15
Peterborough, ,,	3.05			2.74			3.04						3.24		
Toronto, ,,	3.04	2.86	2.77	2.78	2.78	2.92	3.10	3.12	3.22	3.28	3.20	3.24	3.27	3.15	3.01
Port Dover, ,,	2.98	2.83	2.77	2.83	2.83	2.99	3.15	3.22	3.26	3.30	3.25	3.26	3.24	3.10	2.98
Port Stanley, ,,	2.93	2.80	2.76	2.82	2.86	2.99	3.17	3.22	3.24	3.30	3.23	3.25	3.21	3.06	2.95
Windsor, ,,	2.89			2.86		.	3.28			3.32	.		3.23		
Granton, ,,	2.95			2.80			J-18			3.30	.		3.23		
Stratford, "	2.97	.		2.81			3 19					.	3.26		.
Goderich, "	2.90			2.76			3.28			3.28	.		3.22		
Kincardine, "								.							
Saugeen, ,,	2.97	2.77	2.70	2.71	2.83	2.95	3.22	3.24	3.22	3.25	3.17	3.24	3.24	3.10	2 9
Stayner, ,,	2.98	2.82		2.69	2.81	.	3.11	3.18				.	3.20	3. 09	
Little Current ,,	3.02			2.63			3.06			3.25			3.23	1 .	
Fort Garry, Man	3.06	2.98	2.96	2.93	2.87	2.87	2.98	2.98	3.05	3.04	2.95	2.97	2.93	2.77	2.79

1874.

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich " 7 25 a.m. 0 43 p.m. 4 25 p.m. 9 45 p.m. 10 50 p.m.

Stations.	11	th Ju	ne,	12	th Ju	ne.	1.3	th Ju	ne.	14	th Ju	ae.	15	th Ju	1e.
Glace Bay, N.S.	50			48			42			47			° 48		
Sydney, ,,	50	46	41	56	49	43	44	48	47	49	47	35	55	54	43
Guysborough, ,,															
Halifax, "	55	61	47	50	4 6	45	52	66	51	59	64	50	63	58	50
Charl'town, PEI.	46	55	44	50	49	44	50	55	45	46	56	44	52	63	51
Chatham, N.B.	46	61	45	45	52	48	48	50	45	47	59	52	61	71	48
Bathurst, ,	49			47			48						53		
Father Point, Q.	44	55	47	44	47	49	50	44	47	44	45	44	49	74	66
Quebec, ,,	48	61	53	46	50	51	54	56	50	55	65	57	63	76	63
Montreal, ,,	50	57	53	56	63	56	50	56	55	54	67	60	66	74	68
Cornwall, Ont.	53			57			51			63			65		
Ottawa, "	50	57	52	51	53	54	50	66	56	60	7 7	6 6	65	83	64
Brockville, ,,	49	51	50	53	61	51	51	64	51	56	65	59	64	69	62
Kingston, ,,	57	50	52	52	57	52	51	68	53	5 5 '	56	60	60	66	62
Peterborough, ,,	53			57			51			. !	. '		65		
Toronto, ,,	52	51	48	56	57	50	52	68	51	56	67	57	62	64	58
Port Dover, ,,	51	56	50	51	60	52	49	68	52	58	65	56	63	68	62
Port Stanley, ,,	53	65	58	56	59	51	51	60	55	56	6 6	52	61	63	62
Windsor, ,,	62			57			53			62			62		
Granton, ,,	49			52			47			58			60		
Stratford, ,,	50			53			47						58		
Goderich, ,,	53			54		,	52	.		66		,	61		
Kincardine, ,,	54	59	5 9	56	57	4 5	4 5	69	54	62	65	56	54	60	60
Saugeen, ,,	56 _}	57	54	53	45	4 3	43	60	49	57	68	51	59	60	56
Stayner, ,,	54	54	.]	58	49		59	5 5					69	60	
Little Current ,,	57			52			52	.		57			55		
Fort Garry, Man.	52	65	49	49	62	54	51	72	58	54	81	63	58	82	6 5
							7				-				

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	16	th Jur	ne.	17	th Jur	ıe.	18	th Jur	1e.	19	th Ju	ne.	20	th Jur	ne.
Glace Bay, N.S.	3.19			3.50			3.01			3.18			3.30		
Sydney, ,,	3.22	3.21	3.26	3.24	3.19	3.16	3 02	2.99	3.06	3 · 17	3·26	3.33	3.33	3.27	3.24
Guysborough, "	3.19			3.16			2.83			3.03			3.21		
Halifax, ,,	3.16	3.15	3.16	3.17	3.03	2.89	2.65	2.64	2.67	2.90	3.03	3.12	3.16	3.12	3.11
Charl'town, PEI.	3.18	3.14	3.14	3.13	3.04	2.96	2.78	2.76	2 · 86	3.02	3.19	3.25	3.28	3.22	3.19
Chatham, N.B.	3.19	3.02	3.05	3.04	2.90	2.82	2.77	2 77	2.89	3.14	3.29	3.30	3.38	3.30	3.24
Bathurst, "	3.12		١.	3.01			2.84			3.53			3.37		
Father Point, Q.	3.05	2.96	2.93	2.83	2.66	2.68	2.76	2.94	3.04	3.22	3.28	3.32	3.35	3.25	3.22
Quebec, ,.	3.09	2.98	2.85	2.72	2.59	2.51	2.66	2.84	2.96	3.08	3.17	3.22	3.26	3.19	3.16
Montreal, "	3.09	2.87	2.79	2.69	2.53	2.59	2.75	2.89	2.98	3.11	3.12	3 · 20	3.26	3 20	3.19
Cornwall, Ont.	2.99			2.67			2.71			3.09			3.22		
Ottawa. "	3.07	2.72	2.82	2.65	2.61	2.71	2.89	3.01	3.05	$3 \cdot 12$	3.12	3.18	3.22	3.20	3.22
Brockville, "	3.07	2.92	2.87	2.80	2.75	2.79	2.96	3.02	3.08	3.19	3.18	3.21	3.33	3.27	3.28
Kingston, "	3.02	2.87	2.85	2.78	2.75	2.81	2.94	3.07	3.16	3.19	3.15	3.20	3.26	3.26	3.25
Peterborough, ,,	2.88	.		2.75			2.96			3.16			3.17		
Toronto, ,,	2.87	2.76	2.74	2.75	2.80	2.93	3.05	3.03	3.10	3.18	3.08	3.10	3.23	3.20	3.19
Port Dover, "	2.89	2.79	2.80	2.83	2.88	2.98	3.07	3.06	3.12	3.22	3.12	3.10	3.17	3.16	3 16
Port Stanley, "	2.87	2.81	2.80	2.87	2.91	2.99	3 07	3.05	3.11	3.17	3.12	3.12	3.13	3.13	3.15
Windsor, ,,	2.85	١.		2.99	١		3.12			3.22			3.16		
Granton, ,,	2.82			2.87			3.09			3.18			3.15		
Stratford, ,,	2.85			2.88	.		3.11			3.21			3.19		
Goderich, ",	2.80			2.89			3.11] .		3.20			3.14		
Kincardine, ,,				.											
Saugeen, "	2.86	2.66	2.73	2.84	2.93	3.01	3.11	3.13	3.15	3.20	3.16	3.13	3.25	3.11	3.10
Stayner. ,,	2.78	2.66		2.75	2.84		3.06	3.06		3.18	3.08		3.15	3.10	
Little Current ,,	2.78			2.75	.		3.10		1 .	3.17			3.14		
Fort Garry, Man	. 2.75	2.72	2.79	2.81	2.60	2.61	2.57	2.69	2.84	2.93	2.99	3.05	3.11	2.99	2.93

Little Current,

Fort Garry, Man.

58 83 64

1874.

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

83 75

90 75

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations im the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich 7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m.

10 50 p.m.

4 25 a.m. (of next day.)

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	21	st Ju	ne.	221	ad Ju	ne.	23	rd Ju	ae.	24	th Ju	ne.	25	th Ju	ne.
Glace Bay, N.S.	3.17			2.97			2.85			2.22			2.23		
Sydney, ,,	3.20	3.13	3.04	3.01	2.91	2.87	2.79	2 64	2.51	2.25	2.36	2.50	2.54	2.49	2.51
Guysborough, ,,	3.15			2.97			2.76			2.29			2.51		
Halifax, "	3.07	3.03	2.99	2.98	2.90	2.89	2.84	2.67	2.47	2.38	2.52	2.65	2.66	2.53	2.57
Charl'town,PEI.	3.16	3.11	3.07	3.04	2.92	2.87	2.77	2.58	2.42	2.39	2.51	2 61	2.59	2.53	2.51
Chatham, N.B.	3.23	3.14	3.11	3.04	2.85	2.81	2.71	2.46	2.42	2.49	2.53	2.66	2.59	2.53	2.61
Bathurst, "		١.		2.98			2.64			2.46			2.55		
Father Point, Q.	3.21	3.05	3.03	2.96	2.75	2.71	2.60	2.47	2.21	2.65	2.67	2.78	2.61	2.51	2.53
Quebec, "	3.16	2.99	2.99	2.97	2.77	2.79	2.79	2.53	2.62	2.82	2.77	2.82	2.76	2.59	2.63
Montreal, "	3.21	3.08	3.05	3.03	2.86	2.84	2.78	2.64	2.79	3.01	2.93	2.98	2.94	2.76	2.74
Cornwall, Ont.	3.19			3.04			2.81			3.07	! !		2.97		.
Ottawa, ,,	3.21	3.10	3.07	3.03	2.87	2.86	2.83	2.70	2.90	3.10	3.00	3.04	3.02	2.84	2.78
Brockville, "	3.26	3.16	3.16	3.17	3.01	2.97	2.92	2.80	2.87	3.16	3.09	3.12	3.09	2.91	2.87
Kingston, "	3.25	3.17	3.12	3.14	2.99	2.95	2.93	2.80	2.88	3.15	3.09	3.14	3.14	2.89	2.8
Peterborough, ,,				3.09			2.91			3.12			2 99		
Toronto, "	3.50	3.13	3.12	3.10	2.96	2.95	2.95	2.85	2.91	3.17	3.10	3.08	3.02	2.82	2.78
Port Dover, "	3.19	3.13	3.12	3.16	3.03	3.02	2.99	2.90	2.94	3.11	3.07	3.10	3.06	2.86	2.78
Port Stanley, ,,	3.17	3.15	3.12	3.12	3.04	3.02	3.01	2.90	2.95	3.08	3.09	3.10	3.03	2.88	2.79
Windsor, ,,	3.22			3.24		! !	3.04	٠.		3.12			3.02		
Granton, "	3.17			3.11			2.99] .		3.10			3.02		
Stratford, "				3.14	.		3.01			3.14			3.04	١.	
Goderich, ,,	3.75] .	3.07			2.97			3.13			2.98		.
Kincardine, "															į .
Saugeen, ,,	3.19	3.13	3.10	3.05	2.93	2.90	2.94	2.95	2.98	3.26	3.10	3.04	2.97	2.77	2.69
Stayner, "			.	3.06	2.90		2.88	2.93		3.16	3.11		2.96	2.69	
Little Current,,	3.13	١.		3.02			3.90			3 2 3	١.		2.99	.	.
Fort Garry, Man.	2.86	2.72	2.78	2.83	2.85	2.90	2.95	2.85	2.78	2.69	2.20	2.77	2.81	2.85	2.88

TABLE II .- Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

Greenwich ,

0 43 p.m.

9 43 p.m.

Stations.	21s	st Jur	ıe,	22 n	d Ju	ne.	23r	d Jun	ie.	24t	h Jun	ie.	25t	h Jur	16.
Glace Bay, N.S.	42		•	49	°	9	62		•	56		0	51		0
Sydney, ,,	45	47	48	51	55	52	71	70	52	56	54	46	50	47	4(
Guysborough, ,.	.												.		
Halifax, ,,	54	57	57	63	61	54	57	57	55	66	√56	47	54	54	4
Charl'town, PEI.	53	55	51	54	62	55	61	64	57	55	47	47	50	47	46
Chatham, N.B.	49	62	52	58	80	63	67	81	61	53	59	50	47	50	49
Bathurst, ,,				59			64			51			44		
Father Point, Q.	48	51	49	47	55	54	58	62	49	47	49	48	46	52	5:
Quebec, "	56	76	60	67	73	67	67	63	60	50	65	53	54	73	6
Montreal, ,,	62	74	69	66	81	72	70	77	63	54	61	60	60	66	5
Cornwall, Ont.	60			74			72			56			60	;·*	
Ottawa, "	63	80	67	70	89	70	72	81	76	52	72	63	57	63	6
Brockville, ,,	64	75	64	66	74	68	72	77	68	65	69	57	62	62	5
Kingston, "	59	66	61	60	66	61	71	73	67	56	63	59	62	59	5
Peterborough, ,,				73			79			60			63		
Toronto,	63	68	57	69	87	74	763	84	72	61	67	60	65	63	5
Port Dover, "	62	70	65	64	76	74	76	75	73	65	79	60	65	73	6'
Port Stanley, "	69	73	61	6 8	77	68	73	86	71	71	74	59	68	74	6
Windsor, "	68			74			76			74			76		
Granton, "	70			73			76			66			68		
Stratford, "				67			72			63			66		
Goderich, "	75			74		l	74			66	!		73		
Kincardine, "	68	73	65	70	90	75	70	71	61	61	69	61	70	68	6
Saugeen, ,,	68	72	62	74	81	74	67	69	57	59	64	58	73	72	6
Stayner, ,,				83	90	}	79	70		59	62		66	74	
Little Current ,,	66			68		ļ ,	65			57			54		
Fort Garry, Man.	67	75	67	69	71	62	61	81	73	74	93	65	60	65	6

TABLE I.—Barometer at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich "

0 43 ρ .m.

4 25 p.m. 9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

The Height of the Barometer=27 inches + the numbers in the Table.

Stations.	26	th Jui	10.	27	th Ju	ne.	28	th Ju	ne.	29	th Ju	ne.	30	th Jur	1e.
Glace Bay, N.S.	2.47			2.78			2.61			2.81		1.	2.99		
Sydney, "	2:50	2.63	2.75	2.80	2.73	2.74	2.66	2.65	2.70	2.83	2.90	2.99	3.00	2.98	2.95
Guysborough, "	2.49			2 80			 •						.] .	
Halifax, ,,	2.52	2.62	2.77	2.81	2.75	2.75	2.70	2.60	2.68	2.78	2.88	2.90	2.84	2.78	2.85
Charl'town, PEI.	2.24	2.66	2.75	2:82	2.69	2.68	2.69	2.68	2.75	2.84	2.88	2.94	2.94	2.87	2.89
Chatham, N.B.	2.58	2.61	2.71	2.79	2.64	2 63	2.70	2.72	2.77	2.82	2.82	2.83	2.87	2.83	2.87
Bathurst, ,,	2.58			2 75	١.			• .		2 84	١.		2 86		
Father Point, Q.	2.59	2.61	2.62	2.72	2.59	2 67	2.66	2.65	2.67	2.70	2.72	2.62	2.58	2.73	2.84
Quebec, ,,	2.65	2.59	2.70	2.79	2.61	2.63	2 61	2.63	2.63	2.60	2.45	2.48	2.63	2.67	2.79
Montreal, ,,	2.74	2.72	2.77	2.84	2.73	2.73	2.68	2.23	2.58	2.55	2.45	2.65	2.79	2.84	2.95
Cornwall, Ont.	2.73			2.85	١.		2.66			2.61			2.81		
Ottawa, "	2.74	2.83	2.78	2.85	2.74	2 72	2.68	2.52	2.54	2.21	2.47	2.67	2.86	2.86	3.00
Brockville, "	2.81	2.80	2.86	2.90	2.89	2.86	2.78	2 65	2.65	2.62	2.63	2.78	2.95	3.00	3.03
Kingston, "	2.76	2.78	2.84	2.97	2.90	2.87	2.78	2.64	2.60	2.56	2.63	2.79	2.94	2.96	3.03
Peterborough,,,	2.72			2.88						2.53	.		2.95		
Toronto, ,,	2.67	2.76	2 83	2.92	2.82	2.77	2.69	2.54	2.54	2.59	2.65	2.82	3.00	2.96	3.04
Port Dover, ,,	2.69	2.80	2.85	2.94	2.82	2.91	2.78	2.59	2.59	2.59	2.70	2.86	3.04	3.03	3.06
Port Stanley, .,	2.71	2.74	2.85	2.91	2.85	2.80	2.73	2.60	2.61	2.61	2.69	2.87	3.03	3.03	3.08
Windser, ,,	2.78			2.96	.		2.71			2.72	.		3.10		
Granton, "	2.70			2.95			2.61			2.71			3.03		
Stratford, ,,	2.70			2.95						2.63	.		3.09		
Goderich, ,,	2.69			2.93			2.64			2.74			3.05		
Kincardine, ,,				.					.		.				
Saugeen, ,,	2.69	2.80	2.97	2.93	2.79	2.69	2.57	2.43	2.47	2.59	2.78	2.88	3.03	3.04	3.05
Stayner, ,,	2.69	2.79		2.89	2 73			.		2.56	2.72		2.98	3.03	.
Little Current ,,	2.74		2.88			.	2.57			2.51			2.98		
Fort Garry, Man	2.76	2.71	2.69	2.69	2.63	2.57	2.40	2.64	2.75	2.84	2.79	2.81	2.77	2.73	2.87

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations.	26t	h Jur	ie.	27t	h Jur	ie.	281	h Jui	ie.	291	h Ju	ne.	30	th Ju	1e,
Glace Bay, N.S.	50			57	۰	0	56		<u>"</u>	53		0	52		
Sydney, ,,	52	50	37	62	67	51	56	57	49	57	60	46	49	46	45
Guysborough, ,,	.]	, [.		.			•.		
Halifax, ,,	60	65	49	64	68	61	60	72	60	56	56	50	48	52	49
Charl'town, PEI.	50	56	50	57	69	61	56	56	49	59	62	55	49	52	48
Chatham, N.B.	52	68	48	59	81	60	57	59	53	59	62	52	49	55	51
Bathurst, ,,	54			56						57			51		
Father Point, Q.	50	66	58	57	62	61	54	62	59	67	68	67	58	.57	59
Quebec, ,,	64	76	61	63	81	71	63	59	60	61	65	64	64	66	60
Montreal, ,,	63	70	62	63	80	68	66	81	69	64	83	65	62	70	64
Cornwall, Ont.	61	.,		71	,		74			77			63		
Ottawa, ,,	61	75	59	64	85	67	68	83	75	77	87	66	69	77	61
Brockville, "	61	68	-56	60	71	62	71	81	75	82	75	68	59	65	59
Kingston, ,,	58	69	58	63	70	62	62	77	70	69	79	63	62	63	56
Peterborough, ,,	58			64	•					81			59		
Toronto, "	57	61	58	65	75	61	71	84	71	76	81	61	57	72	57
Port Dover, ,,	71	75	60	64	76	64	67	83	71	72	69	66	54	67	58
Port Stanley, "	71	70	62	66	74	62	71	85	72	72	83	63	56	74	50
Windsor, "	71			65			80			71			60		
Granton, ,,	67			63			73			68			62		
Stratford, ,,	8			62						68			51		
Goderich, "	66			62			77			68			59		
Kincardine, ,,	58	55	50				,						1.		
Saugeen, ,,	54	62	54	59	70	64	77	78	79	66	58	48	51	63	49
Stayner, ,,	70	62		66	70					74	- 60		58	55	-
Little Current ,,	60			73		! ! .	63			65			60		
Fort Garry, Man.	60	73	66	62	74	64	59	62	51	50	73	60	59	65	59

Table J.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

The Height of the Barometer=27 inches + the numbers in the Table.

Stations.	1:	st July	7•	21	ıd Jul	у.	3	rd Jul	y.	4	th Jul	у.	5:	th Jul	y.
Glace Bay, N.S.	2.91	 -		3.17	 		3.18			3.11	 ·	 •	3.15		.
Sydney, "	2.93	3^07	3.12	3 18	3.18	3.20	3.23	3.21	3.19	3·10	3.01	3.07	3.15	3.15	3.00
Guysborough, ,,					۱.								3.19		
Halifax, ,,	2.92	3.00	3.10	3.18	3.18	3.50	3.17	3.21	3.06	3.00	3.00	3.04	3.10	3 02	3.0
Charl'town, PEI.	2.96	3.08	3.15	3.18	3.18	3.19	3.20	3.14	3.12	3.07	3.04	3.07	3.14	3 12	3.0
Chatham, N.B.	3.01	3.15	3.22	3.23	3.17	3.17	3.12	3.11	3.09	3.07	3.02	3.07	3.15	3.13	3.10
Bathurst, ,,	2.85			3.20		.	3.09			3.06		 •			١.
Father Point, Q.	3.00	3.09	3.11	3 · 11	3.04	3.05	3.00	2.97	2.99	2.97	2.96	3.01	3.08	3.06	3.04
Quebec, ,,	2.99	3 01	3.05	2.99	2.88	2.87	2.85	2.83	2.88	2.91	2.87	2.93	2.99	3 00	3.03
Montreal, ,,	3.03	2.97	2.98	2.91	2.84	2.86	2.89	2.93	2.94	2.95	2 85	2.87	2.98	2.99	3.03
Cornwall, Ont.	3.02			2.86			2.94			2.89			2.94		
Ottawa, "	3.05	2.97	3.07	2.92	2.82	2.90	3.01	3.01	2.91	2.90	2.83	2.91	2.98	2.99	3.04
Brockville, "	3.15	3.06	3.03	2.94	2.91	2.99	3.06	3.03	3.02	2.91	2.87	2.89	3.02	3.08	3.1
Kingston, "	3.12	3.05	3.00	2.93	2.87	2.93	3.02	3.02	3.00	2.92	2.83	2.88	3.00	3.02	3.0
Peterborough, ,,	3.03			2.86	.	١.	3.02			2.85					
Toronto, "	3.08	2.95	2.92	2.92	2:95	3.01	3.07	2 93	2.96	2.75	2.76	2.87	3.02	3.01	3.0
Port Dover, "	3.09	2.94	2.94	2.96	2.99	3.06	3.09	2.99	2.99	2.76	2.71	2.88	3.07	3.06	3.02
Port Stanley, "	3.07	2.97	2.92	2.96	3.01	3.09	3.07	3.00	2.92	2.76	2.74	2.90	3.05	3.05	3.06
Windsor, ,,	3.07			3.04			3.15		-	2.82			3.13		
Granton, ,,	3.07	.		3.01	•		3.05		.	2.73		•	3.07		
Stratford, "	3.09			3.04			3.13			2.77					
Goderich, "	3.04		} .	3.03			3.10			2.71			3.08		١.
Kincardine, ,,		2.87	2.93	3.04	3.09	3.12	3.12	2.95	2.88	2.72	2.88	3.00	3.13	3.09	3.0
Saugeen, ,,	3.06	2.84	2.88	3.08	3.05	3.07	3.11	2.95	2.82	2.67	2.83	2.94	3.07	3.07	3.0
Stayner, ,,	3.01	2.86	.	2.92	2.97		3.03	2.90		2.71	2.83				.
Little Current ,,	2.99			2.98	.		3.06			2.78	.	!	3.08		
Fort Garry, Man	3.04	3.03	2.97	2.97	2.80	2.71	2.66	2.74	2.81	2.85	2.66	2.63	2.79	2.79	2.8

Table II .- Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

Ștations.	18	t July	.	2n	d July	y.	3r	d July	7.	4t	h July	·.	5t	h July	
Glace Bay, N.S.	° 45	.	° .	50	°		55			46	<u> </u>		9 52	,	Q
Sydney, ,,	45	47	46	52	51	48	56	54	45	48	47	46	51	53	47
Guysborough, ,,	 [.	.	.	. [. ! }	,
Halifax, ,,	52	62	48	52	54	48	53	51	49	51	57	51	52	51	49
Charl'town, PEI.	50	56	50	52	56	53	54	56	50	49	54	51	53	55	52
Chatham, N. B.	51	49	48	53	57	51	55 j	55	53	55	59	52	52	58	52
Bathurst, ,,	53	.		52			54	.		54					
Father Point, Q.	52	47	48	50	47	49	51	45	44	51	49	44	50	54	54
Quebec, ,,	57	58	51	54	55	55	56	59	55	59	65	55	55	64	57
Montreal, ,,	65	77	67	60	67	61	60	64	62	64	72	64	61	73	65
Cornwall, Ont.	70			63		,	60	.		63	,		62		
Ottawa, ,,	66	84	61	60	77	62	60	70	59	60	65	60	69	82	65
Brockville, "	65	71	60	66	67	62	62	67	59	60	66	63	68	74	64
Kingston, ,,	61	70	63	66	69	62	63	68	60	62	65	60	67	73	70
Peterborough, ,,	69			69			65			61					· ·
Toronto, ,,	65	70	59	64	71	55	65	75	59	61	64	62	67	76	66
Port Dover, "	58	76	65	65	74	58	59	67	62	65	79	64	64	73	68
Port Stanley, "	58	73	64	63	69	53	60	69	62	70	81	62	63	74	59
Windsor, "	71			69	,		70			77			67		
Granton, ,,	65	[.]		53			63	,		73			63		
Stratford, ,,	58	.		60			57			64					
Goderich, "	64			56			64			73			69		`
Kincardine, "		79	64	49	61	50	58	72	64	69	58	55	57	66	58
Saugeen, ,,	63	77	60	49	57	52	56	64	62	69	58	57	58	64	56
Stayner, ,,	66	70		61	67		60	65		64	61				
Little Current ,,	61			63			65] .	61	١.		74		
Fort Garry, Man.	54	71	60	57	78	69	65	82	68	66	82	75	67	77	6:

Table I. —Barometér at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

10 50 p.m.

Greenwich "

0 43 p.m.

4 25 p.m. 9 43 p.m.

4 08 a.m. (of next day.)

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	61	th J ul	у.	71	h Jul	у.	81	h Jul	у.	91	th Jul	у.	10	th Ju	ıly.
Glace Bay, N.S.	2 99			3.05			2.73			2.59]	2.88		1.
Sydney, .,	3.02	3.07	3.12	3.10	3.02	2.93	2.75	2.58	2.61	2.64	2.73	2.83	2.95	3.03	3 05
Guysborough, ,,	2.96			3.08			2.71	٠,	. :	$2^{.}65$			2.97	١.	
Halifax, ,,	3·01	3.06	3.12	3.11	2.99	2.90	2.75	2.63	2.61	2.70	2.78	2.89	3.02	2.99	2.98
Charl'town, PEI	3.07	3.10	3.10	3.08	2 91	2.83	2.65	2.59	2.63	2.70	2.76	2.87	3.03	3.00	2.98
Chatham, N. B.	3.14	3.01	3.03	2.96	2.76	2.70	2.62	2.56	2.61	2.68	2.77	2.87	3.04	2.93	2:90
Bathurst, ,,	3.11			2.87			2.55			2.71			3.01	.	
Father Point, Q.	3.08	2.96	2.91	2.77	2.57	2.54	2.50	2.49	2.59	2.76	2.80	2.87	2.95	2.80	2.79
Quebec, ,,	3.03	2.95	2.91	2.84	2.67	2.59	2.59	2.53	2.67	2.82	2.84	2.92	2.91	2.77	2.75
Montreal, ,,	3.08	2.98	2.92	2.88	2.72	2.67	2.71	2.67	2.77	2.92	2 91	2.92	2.89	2.81	2.82
Cornwall. Ont.	3.06		ĺ.	2.88			2.73			2.89		١.	2.84		
Ottawa, ,,	3.11	2.94	2.91	2.91	2.84	2.68	2.80	2.70	2.79	2.95	2.89	2.89	2.87	2.80	2.82
Brockville, ,,	3.15	3.04	3.01	3 01	2.88	2.80	2.83	2.80	2.86	3.00	2.96	2.96	2.93	2.88	2.89
Kingston, ,,	3.08	2.99	3.00	3.00	2.87	2.81	2.81	2.79	2.81	2.96	2.92	2.89	2.94	2.86	2.87
Peterborough, ,,	3.01			2.96			2.83			2.90	.		2.83		.
Toronto, ,,	3.08	2.95	2.93	2.93	2.76	2.77	2.80	2.78	2.82	2.90	2 · 87	2.85	2.83	2.81	2.86
Port Dover, "	3.08	2.97	2.97	2.96	2.79	2.79	2.81	2.79	2.81	2.87	2.82	2.83	2.84	2.80	2.89
Port Stanley, ,,	3.07	2.98	2.98	2.94	2.81	2.90	2.82	2.80	2.81	2.82	2.84	2.83	2.82	2.83	2.88
Windsor, ,,	3·10			2.97			2.87			2.91			2.86		
Granton, ,,	3.06			2.94			2.77	•		2.90	•		2.86		
Stratford, ,,	3.09			2.96			2.84			2.91			2.82		
Goderich, ,,	3.04			2.90			2.81			2.89	ļ .		2.82		
Kincardine, "	3.04	2.98	2.97	2.93	2.81	2.83	2.81	2.83	2.87	2.91	2.88	2.86	2.83	2.85	2.96
Saugeen, "	2.97	2.94	2.93	2.90	2.75	2.80	2.81	2.90	2.94	2.92	2;94	2.82	2.80	2.81	2.89
Stayner, ,,	2.96	2.90		2.87	2.73		2.78	2.76		2.88	2.80		2.80	2.76	
Little Current ,,	2.91			2.83			2.80		į .	2.94			2.80		
Fort Garry, Man.	2.86	2.80	2.81	2.88	2.85	2.88	2.87	2.73	2.73	2.86	2.81	2.92	3.11	3.07	3.05

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

Greenwich

0 43 p.m.

Stations.	6t)	h July	,	7t] .•	ı July	7.	8tl	ı July	·.	9t1	ı July	7.	10 t	h July	y .
Glace Bay, N. S.	° 48	.	° .	62	.		53		0	73	°	0	67	.	0
Sydney, ,,	49	54	46	63	59	50	55	65	59	73	68	53	68	68	50
Guysborough, "		.	:		,		
Halifax, ,,	54	66	54	64	56	51	53	69	58	68	76	58	74	71	59
Charl'town, PEI.	54	59	55	59	62	56	58	73	62	66	70	59	65	73	64
Chatham, N.B.	53	75	60	67	74	58	56	66	62	66	74	59	70	78	68
Bathurst, ,,	51			66			58			66			68	.	
Father Point, Q.	49	55	57	69	63	67	57	59	55	53	58	56	57	co	55
Quebec, ,,	60	73	66	70	78	65	69	77	€6	65	76	64	64	73	68
Montreal, ,,	68	75	70	71	82	67	69	81	71	69	77	67	67	73	69
Cornwall, Ont.	67			79			71	. !		71			65		
Ottawa, ,,	68	78	65	73	69	68	70	84	65	67	81	66	65	77	68
Brockville, "	69	76	69	74	67	67	71	78	68	71	76	66	65	74	67
Kingston, "	63	74	68	67	67	64	71	71	71	69	79	70	68	70	65
Peterborough, ,,	73			77			72	,		71			65		
Toronto, "	65	76	69	76	75	68	76	80	70	73	72	68	65	74	67
Port Dover, "	65	76	69	70	76	72	70	75	69	69	87	71	67	75	CS
Port Stanley, "	66	79	68	76	79	73	72	80	69	71	79	71	66	75	68
Windsor, ,,	74			81			73			73			70		
Granton, ,,	69			78			78			69			65		
Stratford, "	66			72			72			57			66		
Goderich, "	69			80			77			72			72		
Kincardine, "	70	77	65	74	78	66	68	78	66	67	70	69	70	70	59
Saugeen, ,,	70	69	58	74	76	60	65	73	63	53	66	63	70	66	58
Stayner, "	74	86		79	78		73	82	. .	73	85		69	78	
Little Current ,,	71			72			72			68			69	١.	
Fort Garry, Man	63	82	67	59	80	64	60	82	69	61	69	60	56	73	62
5_7	<u> </u>	<u> </u>		<u>'</u>	<u> </u>	٠	97	<u> </u>	<u> </u>		<u> </u>	<u>: </u>	1	1	

Table I .-- Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p. m. 9 43 p. m.

Greenwich "

0 43 p. m.

10 50 p. m. 4 08 a. m. (of next day).

The Height of the Barometer = 27 inches-1-the numbers in the Table.

Stations.	11	th Ju	ly.	12	th Jul	y.	13	th Jul	y.	14t	h Jul	у.	15	th Jul	l ý .
lace Bay, N.S.	2.97			8.08		.	3.25			3.02			2.86		.
Sydne y , ,,	2.97	2.85	2.93	3.06	3.21	3.27	3.27	3.17	3.16	3.04	2.82	2.84	2.90	2.79	2.70
duysborough, ,,	2.91	.		3.10			3.23			3·01			2.91		
Halifax, ,,	2.94	2.89	2.99	3.14	3.16	3.50	3.24	3.13	3.11	3.02	2.88	2.92	2.98	2~81	2.76
harl'town,PEI.	2.87	2.87	2.95	3.19	3.23	3.25	3.24	3.12	3.10	2.98	2.85	2.93	2.96	2.74	2.66
hatham, N.B.	2.88	2.82	2.96	3 22	3.22	3.23	3.22	3.07	3.00	2.91	2.82	2.91	2.88	2.63	2.59
Bathurst, ,,	2.86		١.				3.21			2.86			2.80	١.	١.
Father Point, Q.	2.78	2.87	3.08	3.25	3.16	3.15	3.08	2.97	2.87	2.87	2.85	2.85	2.72	2.55	2.54
Quebec, ,,	2.81	2.89	3.08	3.20	3.12	3.09	3.00	2.89	2.86	2.95	2.92	2.93	2.76	2.58	2.57
Montreal, ,,	2.88	2.99	3.17	3.23	3.10	3.06	2.97	2.91	2.98	3.06	3.04	3.00	2.84	2.66	2.67
Cornwall, Ont.	2.88	1.		3 16			2.91	ļ .		3.08			2.78	, ,	١.
Ottawa, "	2.93	3.00	3.12	3.21	3.07	3.02	2.94	2.93	3.02	3.12	3.20	2.99	2.82	2.68	2.60
Brockville, "	2.98	3.09	3.16	3.22	3.10	3.06	3.00	3.04	3.10	3.20	3.16	3.11	2.96	2.79	2.80
Kingston, ,,	2.97	3.00	3.06	3.16	3.03	2.96	2.96	3.01	3.07	3.16	3.11	3.06	2.98	2.77	2.70
Peterborough, ,,	2.93						2.96			3.10		١.	2.83	1 .	
Coronto, ,,	2.96	2.98	3.08	3.09	2.99	2.95	2.98	3.02	3.09	3.12	3.07	3.01	2.92	2.76	2.8
Port Dover, "	2.97	2.98	3.05	3.04	2.95	2.91	3.02	3.08	3.12	3.18	3.11	3.06	2.98	2.83	2.8
Port Stanley, "	2.95	2.92	3.05	3.02	2.95	2.94	3.05	3.07	3.11	3.17	3.10	3.02	2.99	2.87	2.86
Windsor, ,,	3.04			3.08]] •		3.13			3.20		١.	3.00		١.
Granton, ,,	3.00		1 .	3.06			3.08			3.02			2.95] .	.
Stratford, ,,	3.03						3.06			3.19			2.95		
Goderich, "	2.93			3.07			3.07			3.12			2.89		.
Kincardine, ,,	3.03	3.09	3.15	3.13	3.04	3.03	3.07	3.05	3.10	3.17	3.03	2.98	2.89		2.9
Saugeen, ,,	3.06	3.09	3.12	3.10	2.99	2.99	3.06	3.00	3.04	3.13	3.07	3.00	2.89	2:74	2-8
Stayner, ,,	2.99	3.03				•	3.00	3.01	.	3.19	2.99	.	2.88	2.67	
Little Current ,,	3.11			3.17			2.99			3.10		.	2.71	.	
Fort Garry, Man	3.03	2.81	2.73	2.59	2.43	2.55	2.83	2.86	2.85	2.57	2.47	2.67	3.01	3.01	2.8

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a. m. Greenwich , 0 43 p. m.

4 25 p. m. 9 43 p. m.

Stations.	11t	h Jul	у.	12t	h July	7.	13t	h July	7.	14t	h July	7.	15t	h July	7.
Glace Bay, N.S.	63	9		72	°	0	66	.	Q .	71	.	0	73	.	9
Sydney, "	62	74	63	71	63	52	67	66	55	67	75	60	73	73	.66
Guysborough, ,,]	
Halifax, "	63	75	62	66	73	60	57	73	64	62	69	66	79	73	61
Charl'town, PEI.	64	75	66	60	64	58	64	70	64	67	74	65	70	74	69
Chatham, N.B.	64	79	65	57	68	54	62	73	69	68	82	65	74	78 I	74
Bathurst, ,,	69	60		.]	68			71		
Father Point, Q.	59	59	55	53	60	57	58	56	55	54	57	59	54	58	63
Quebec, "	69	72	60	60	66	60	54	60	60	64	79	7Ó	70	79	70
Montreal, .,	70	71	60	57	67	64	65	70	64	65	80	73	73	86	71
Cornwall, Ont.	69			60			69			73			77		
Ottawa, ,,	65	70	65	60	70	65	60	71	62	67	89	71	77	87	70
Brockville, "	69	69	60	59	65	61	69	63	62	67	76	69	78	28	70
Kingston, ,,	69	69	62	60	66	61	66	64	66	63	73	65	68	71	69
Peterborough, "	66	. !	. !				60			73		١.	80		
Toronto, ,,	64	73	63	61	61	58	59	75	63	66	80	69	72	78	72
Port Dover, "	65	73	64	61	54	56	56	7,2	64	6.7	79	72	76	82	7,1
Port Stanley, ,,	61	74	63	62	57	57	59	74	64	66	80	70	71	74	67
Windsor, ,,	62			60			63			75			76		,
Granton, ,,	60			58			57			72			76		
Stratford, "	58						59			68			74		
Goderich, "	63		١.	60			59		ļ.	73			75		
Kincardine, "	63	59	54	59	60	57	57	75	65	71	87	80	78		60
Saugeen, "	62	66	53	60	61	56	55	68	64	72	85	79	78	75	60
Stayner, "	65	64					58	75		74	91		81	86	-
Little Current,,	62			68			69			74	,		72	.	-
Fort Garry, Man.	58	78	69	67	83	67	61	75	64	68	74	55	52	76	68
5—	71		·	1	1	<u>'</u> _) (9	<u> </u>	-	<u> </u>			!	l I	

Table I.—Barometer at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

Greenwich "

0 43 p.m.

4 25 p.m. 9 43 p.m.

The Height of the Barometer=27 inches + the numbers in the Table.

Stations.	16	ith Ju	ly.	17	th Jul	ly.	18	th Jul	ly.	19	th Ju	ly.	20	th Ju	ly.
Glace Bay, N.S.	2.63			2.82		.	3·14			3.25			3.21		
Sydney, ,,	2.66	2.66	2.74	2.83	2.93	3.02	3.12	3.16	3 22	3.26	3.23	3· 2 3	3.20	3.06	3.01
Guysborough, ,,	2.65			2.79			3.21		.	3.24			3.19		
Halifax, ,.	2.72	2.70	2.76	2.82	2.89	2.99	3.10	3.12	3.21	3.26	3.24	3.24	3.20	3.08	3.01
Charl'town, PEI.	2.66	2.65	2.78	2.88	2.97	3.04	3.16	3.16	3.21	3.25	3.22	3.22	3.14	2.98	2.79
Chatham, N.B.	2.60	2.65	2.78	2.92	2.95	3.03	3.16	3.10	3.14	$3 \cdot 22$	3.14	3.11	3.00	2.99	2.97
Bathurst, .,	2.57			2.93			3.12					.	2.90		
Father Point, Q.	2.53	2.69	2.83	2.97	2.91	2.99	3.06	2.99	3.04	3 · 10	2.97	2.82	2.74	2 90	3.01
Quebec, "	2.59	2.71	2.85	2.97	2.91	2.98	3.05	3.02	3.09	3.10	2.92	2.86	2·85	2.85	2.92
Montreal, ,,	2.71	2.82	2.91	3.03	2.98	3.03	3.12	3.09	3.12	3.12	2.98	2.91	2.93	2.99	3.00
Cornwall, Ont.	2.74		١.	3.02	.		3.12			3.07			2.92		
Ottawa, ,,	2.78	2.91	2.98	3.04	2 98	3.11	3.11	3.06	3.11	3.09	2.99	2.88	3.03	3.00	3.05
Brockville, ,,	2.86	2 · 97	3.03	3.12	3.08	3.12	3.18	3.16	3.18	3.15	3.05	2.99	3.04	3.08	3.11
Kingston, ,,	2 87	2.91	3.03	3.09	3.03	3.12	3.09	3.01	3.13	3.17	3.08	2.96	3.03	3.01	3.08
Peterborough, ,,	2.86			3.04			3.11						2.96		į .
Toronto, "	2.93	2.98	3.05	3.09	3.03	3.04	3.10	3.05	3.10	3.07	2.94	2.92	3.02	3.01	3.08
Port Dover, "	2.97	3.03	3.08	3.12	3.04	3.06	3.12	3.06	3.10	3.10	3.01	2.98	3.03	3.02	3.08
Port Stanley, ,,	2.98	3.03	3.08	3.10	3.03	3.01	3.09	3.06	3.11	3.09	3.01	3.00	3.07	3 07	3.11
Windsor, ,,	3.07			3.14		.	3.13			3.09			3.14	١.	
Granton, ,,	3.00			3.14		 •	3.10			3.06		· ·	3.08		
Stratford, ,,	3.01			3.14	.		3.13						3.10		
Goderich, "	3.03			3.09	ļ .	۱.	3.09			3.01			3 10		_
Kincardine, "	3.03	3.10	3.11	3.09	3.00	3.01	3.03	3.03	3.07	3.00	2.92	3.03	3.13	3.12	3.12
Saugeen, ,,	3.08	3.07	3.07	3.10	3.03	2.97	3.03	3.10	3.13	2.99	2.83	2.98	3.11	3.11	3.14
Stayner, ,.	2.92	2.98		3.06	2.95		3.02	2.98					3.07	3.09	ļ .
Little Current ,,	3.02			3.07			3.02			2.87			3.18].	.
Fort Garry, Man.	2.86	2.84	2.88	2.87	2.76	2.69	2.60	2.32	2.59	2.97	3.14	3.12	3.12	3.03	3.07

A. 1875

1874.

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich ,, 7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m. 10 50 p.m.

Stations,	16	th Jul	у.	17	th Jul	iy.	18	th Ju	ly.	19	th Ju	ly.	20	th Ju	ly.
Glace Bay, N S.	•		°.	63	°.	61			°	66	9	°	72	ı °	l °.
Sydney, ,,	81	1	65	66	60	55	67	65	46	71	74	58	73	65	57
Guysborough, ,,						۲.			 •					.	
Halifax, ,,	74	69	58	66	70	58	66	66	59	68	70	58	61	62	58
Charl'town, PEI.	72	83	65	60	67	56	62	73	63	66	75	64	65	70	63
Chatham, N.B.	75	80	65	70	74	59	60	82	60	71	79	66	65	70	60
Bathurst, ,,	77			68			68						63		
Father Point, Q.	59	60	61	56	60	55	55	62	59	66	80	82	58	63	61
Quebec, ,,	70	73	63	66	79	64	69	79	66	72	84	76	68	75	64
Montreal, ,,	69	69	64	67	72	66	65	77	68	70	85	74	69	67	62
Cornwall, Ont.	74			70			70			80			71		
Ottawa, ,,	68	74	60	64	76	65	65	81	67	66	85	77	60	72	63
Brockville, "	73	67	60	67	70	62	68	75	61	77	80	75	69	71	60
Kingston, ,,	64	71	61	65	68	60	62	71	67	69	79	78	69	73	63
Peterborough, ,,	61			65			66						68		
Toronto, ,,	61	67	55	59	69	64	68	81	65	72	79	73	66	75	58
Port Dover, ,,	61	64	55	56	72	64	65	86	68	70	79	72	73	76	62
Port Stanley, ,,	62	66	51	56	73	58	68	79	63	71	80	73	65	70	56
Windsor, ,,	62			60			67	,		74			65		
Granton, ,,	57			50		.	70	.	•	72		,	62		
Stratford, ,,	57			56			66						60		
Goderich, ,,	55			61		. (69			74			60		
Kincardine, ,,	50	58	48	59	74	68	68	86	70	74	78	60	59	58	51
Saugeen, ,,	50	56	44	54	69	64	67	78	67	73	85	60	57	58	41
Stayner, ,,	58	67	. [65	80	.	74	88		.	.	٠,	59	60	
Little Current ,,	57		.	53		.]	65	.	.	72		.	57	.	
Fort Garry, Man.	56	78)	63	56	85	71	68 1	86	62	56	67	53	50	79	65

1872

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich , 0

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	21	st Jul	у.	221	ad J ul	у.	23	rd Jul	у.	24	th Jul	y.	25	th Jul	у.
Glace Bay, N. S.	2 96			2 83			3 02			3·10			3·16		
Sydney, "	2.97	2.90	2.83	2.87	2.90	2.98	3.03	3.04	3.09	3.12	3·12	3·17	3·18	3.12	3 · 20
Guysborough, ,,	2.94			2.86			3.01			3·10			3.15		
Halifax, "	2.98	2.86	2.85	2.91	2.97	2.98	3.04	3.01	3 09	3.12	3.11	3.13	3.18	3·14	3.20
Charl'town, PEI	2 96	2.89	2.89	2.92	2.96	2.97	3.07	3.05	3.07	3·10	3.09	3.13	3.17	3·13	3.18
Chatham, N.B.	2.99	2.86	2.88	2.95	2.94	3.01	3.13	2.95	2.98	3.04	2.99	3.04	3.14	3.03	3.11
Bathurst, ,,	2 99			2.95			3.08			2.99			3.08		
Father Point, Q.	2.98	2.95	2.90	2.97	2.97	3.02	2.96	2.79	2.82	2.94	2.93	2.94	2.98	2.90	2.92
Quebec, ,,	2.94	2.86	2.94	3.05	2.95	2.99	3.00	2.85	2.91	2.97	2.88	2.89	3.03	2.93	2.96
Montreal, ,,	3 05	2.97	3.00	3.11	3.09	3.02	3.03	2.99	2.95	2.99	2.99	2.97	3.03	2.96	2.99
Cornwall, Ont	3.01			3.09			3.00			2.96			2.97		
Ottawa, "	3.09	2.97	3.00	3.11	2.99	2.99	3.01	2.92	2.93	2.97	2.91	3.00	2.97	3.00	2.92
Brockville, "	3.11	3.04	3.10	3.17	3.09	3.11	3.10	3.02	3.01	3:07	2 99	3.01	3.07	3.00	2.98
Kingston, ,,	3.11	3.01	2.99	3.16	3.07	3.04	3.03	2.97	2.95	3.03	2.94	2.91	3.01	3.02	3.00
Peterborough, ,,	3.07			3.13			3.04	1		2.98	.		2.89		
Toronto, "	3.12	3.04	3.09	6.14	3.03	3.03	3.04	2.92	2.92	2.96	2.87	2.88	2.90	2.85	2.88
Port Dover, "	3.14	3.08	3.10	3.15	3.04	3.04	3.04	2.93	2.91	2.95	2.88	2.87	2.91	2.88	2.89
Port Stanley, "	3.14	3.07	3.11	3.14	3.07	3.05	3.03	2.94	2.94	2.93	2.87	2.86	2.88	2.88	2 89
Windsor, ,,	3.17	1		3.18			3.02			2 98			2.89		
Granton, ,,	3.18			3.14			3.03	.	.	2.91			2.87		-
Stratford, ,,	3 17	1.		3.18		1	3 06			2.94			2.89		-
Goderich, ,,	3.15	1.		3.14	j .		3.03	.		2.87			2.85		.
Kincardine, ,,	3.19	3.12	3.17	3.15		3.04	3.01	2.91	2.91	2.90		2.85	2.86	2.83	2.8
Saugeen, ,,	3.18	3.10	3.11	3.13	3.05	2.98	2.97	2.88	2.88	2.87	2.89	2.92	2.83	2.82	2.9
Stayner, ,	3.11	3.04		3.08	3.01		2.95	2.87		2.87	2.81		2.83	2.77	1.
Little Current,	3.13			3.10		.	2.90		.	2,92	.		2.79		.
Fort Garry, Ma	į.	2.94	2.80	2.69	2.60	2.77	-: - 2∵06	2.83	2:69	2.52	2.45	2.49	2.70	2.33	2.9

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich

7 25 a.m. 0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations.	21	st Jul	у.	22	nd Ju	ly.	23	rd Ju	ly.	24	th Ju	ly.	25	ith Ju	ly.
Glace Bay, N.S.	62			60			67		ļ .	65			74	.	١.
Sydney, "	61	64	59	63	69	49	67	66	47	71	73	55	73	76	61
Guysborough, "															
Halifax, ,,	61	62	60	65	73	59	68	70	57	59	69	56	69	69	57
Charl'town, PEI	62	61	56	62	67	59	63	70	62	65	75	65	66	79	64
Chatham, N.B.	63	75	57	67	75	57	60	78	62	68	84	65	69	85	66
Bathurst, ,,	61			61			62			70		<u> </u>	72	f .	١.
Father Point, Q.	57	65	62	57	65	61	66	69	72	69	72	69	71	74	72
Quebec, ,,	65	72	63	65	73	61	66	80	70	70	85	72	74	84	73
Montreal, ,,	65	75	68	66	74	65	67	80	71	70	83	72	71	82	71
Cornwall, Ont.	70			72			74			76			81		
Ottawa, "	62	78	67	66	80	63	62	81	65	67	87	68	72	87	76
Brockville, "	71	77	62	69	75	63	71	78	66	74	82	69	76	83	77
Kingston, ,,	66	73	62	66	71	64	64	77	69	68	81	75	70	79	74
Peterhorough, ,,	66			68			71	.		69			74		
Toronto, "	63	76	60	64	75	60	69	76	65	70	72	67	74	82	72
Port Dover, ,,	57 ₁	74	62	62	78	62	62	83	69	64	83	73	73	80	73
Port Stanley, ,,	56	74	58	59	78	57	60	78	62	67	80	72	74	77	73
Windsor, ,,	65			68			68			68			72		
Granton, ,,	56			66			67	,		67			75		
Stratford ,,	55	.		59			61			65			72		
Goderich, ,,	65			70			64			75			75		
Kineardine, "	56	68	54	63		59	65	81	69	72		76	75	81	72
Saugeen, ,,	57	64	49	65	71	57	63	77	62	68	76	71	74	74	73
Stayner, ,,	61	68		73	79		72	80		76	80		76	84	
Little Current ,,	65			70			71		,	′ 6 8			72	,	
Fort Garry, Man.	55	82	74	65	32	65	54	79	66	65	77	67	59	€ 4	õõ

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. 4 25 p.m. 10 50 p.m. Greenwich , 0 43 p.m. 9 43 p.m. 4 08 a.m. (of next day.)

The Height of the Barometer=27 inches + the numbers in the Table.

Stations.	26	th Jul	ly.	27	th Jul	у.	28	sth Ju	ly.	29	th Ju	ly.	30	th Jul	y
Glace Bay, N.S.	3.30			3·10			3·13			2.96			2.85		•
Sydney, "	3.22	3.15	3.12	3·11	3.05	3.07	3.06	3.02	3.02	3.00	2.95	2.94	2.86	2.62	2.63
Guysborough, ,,	3.21			3.06			3.03		,	2.96			2.81	.	
Halifax, "	3.23	3.16	3.13	3.06	3.01	3.02	3.02	2.98	3.00	2.96	2.94	2.97	2.79	2.64	2.75
Charl'town, PEI.	3.22	3.09	3.09	3.06	2.98	3.02	3.04	3.00	3.02	2.99	2.94	2 93	2.80	2.63	2.77
Chatham, N.B.	3.16	3.00	3.01	3.00	2.89	2.98	3.04	3.03	3.04	3.01	2:92	2.85	2.73	2.69	2.80
Bathurst, ,,			. 🥕	2.87			3 04			2.98			2.70		
Father Point, Q.	$2 \cdot 92$	2.74	2.68	2.80	2.92	2.98	3.05	3.02	3.04	2.96	2.85	2.82	2.80	2.77	2.90
Quebec, ,,	2.96	2.72	2.74	2.76	2.90	2.97	3.02	2.94	2.95	2.78	2.79	2.82	2.81	2.77	2.85
Montreal, ,,	2.96	2.80	2.78	2.79	2.95	3.02	\$ ·01	2.94	2.85	2.87	2.86	2.89	2.91	2.90	2.92
Cornwall, Ont.	2.88			2.84			2.99			2.85	\ .		2.93		
Ottawa, "	2.90	2.77	2.74	2.89	2.92	3.01	3.03	2.91	2.92	2.88	2.84	2.94	3.01	2.91	2.90
Brockville, "	2.99	2.88	2.86	2.95	3.00	3.05	3.04	2.98	2.97	2.98	2.96	2.99	3.06	3.01	3.03
Kingston, ,,	2.96	2.83	2.87	2.93	2.94	2.98	3.00	2.92	2.92	2 95	2.89	2.94	3.05	2.91	2.98
Peterborough, ,,															
Teronto, ,,	2.81	2.75	2.82	2.92	2.93	2.97	2.98	2.95	2.94	2.98	2.96	3.03	3.08	2.96	2.87
Port Dover, "	2.78	2.81	2.84	2.94	2.94	2.96	2.96	2.94	2.99	3.00	2.97	3.05	3.10	3.03	2.92
Port Stanley, "	2.85	2.80	2.86	2.95	2.95	2.98	2.96	2.93	2.96	3 01	2.98	3.06	3.09	3.02	2.92
Windsor, ",	2 84		٠.	3.04			3.01			3.12			3.14		
Granton, ,,	2.84			2.97			2.98			3.03			3.10	.	
Stratford, ,.				2.99			2.99			3.04		·	3.12		
Goderich, ,,	2.74			3 01			3.00			3.04			3.08		
Kincardine, ,.	2.73	2.75	2.87	2.99	2.91	2.97	2.94	3.00	2.95	3.06	3.06	3.08	3.06	2.94	2.81
Saugeen, ,,	2.75	2.77	2.90	3.00	3.00	3.03	3.03	3.04	2.98	2.99	3.03	3.07	3.07	2.95	2.84
Staymer, ,,				2.93	2.94		2.97	2.92	.	2.96	2.98		3 01	2.89	.
Listle Current ,,	2 63			3.09			3.08			3.02			3.02		.
Fort Garry, Man	. 3.12	3.06	3.08	3.07	2.97	2.95	2.98	2.97	3.00	2.98	2.86	2.78	2 · 77	2.72	2.77

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich , 7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m. 10 50 p.m.

Stations.	26	th Jul	у.	27	th Jul	y.	28	th Jul	ly.	29	th Jul	ly.	30	th Ju	ly.
Glace Bay, N.S.	72		,	70	•	•	77		•	68	•		68	•	
Sydney, ,,	77	72	54	70	69	66	77	76	6 6	67	67	64	67	67	65
Guysborough, ,,			.				.						.		
Halifax, ,,	70	66	58	68	67	63	66	71	65	69	67	65	67	66	62
Charl'town, PEI.	65	75	61	63	74	66	68	69	63	65	73	66	66	67	59
Chatham, N.B.	67	79	62	64	79	65	62	61	59	61	64	61	65	68	56
Bathurst, ,,				70			61			63			64		.•
Father Point, Q.	67	75	77	61	63	60	60	60	58	57	58	53	52	56	55
Quebec, ,,	76	86	76	69	62	62	65	65	60	56	60	60	69	75	€2
Montreal, ,,	73	79	75	69	65	61	61	62	61	62	68	65	67	78	67
Cornwall, ,,	84			65			60			64			68		
Ottawa, ,,	76	79	74	63	79	64	65	67	64	65	73	67	69	84	65
Brockville, ,,	80	73	73	61	67	63	59	61	60	65	74	64	71	74	65
Kingston, ,,	72	72	68	62	71	65	61	61	61	62	75	61	62	74	65
Peterborough, ,,															
Toronto, ,,	73	74	68	64	70	66	61	63	60	64	74	63	66	75	68
Port Dover, ,,	70	74	73	64	67	63	60	62	56	59	76	63	63	74	69
Port Stanley, ,,	70	75	70	61	67	62	62	73	64	60	76	57	66	73	70
Windsor, "	75			60			61			54			, 63		
Granton, ,,	69			57			61			62			65		
Stratford, ,,				57			61		 .	60			58		١.
Goderich, ,,	76			57			60			61		.	67		
Kincardine, ,,	75	68	5 8	58	64	59	59	64	57	57	62	55	63	69	65
Saugeen, ,,	69	65	56	56	67	55	58	70	58	62	65	52	62	71	62
Stayner, ,,				57	70	l ! .	60	64		65	73		72	71	
Little Current ,,	68			58			66			71			73		
Fort Garry, Man.	48	68	56	52	76	64	54	74	62	5 6	72	65	59	85	66

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	31	st Ju	ly.	1.5	t Aug	ust.	2nd	Aug	ust.	3rd	l Aug	ust.	4th	Aug	ust.
Glace Bay, N.S.	2.82			2.87			2.67			2.56			2·87		
Sydney, ,,	2.84	2.93	2.97	2.87	2.67	2.65	2.63	2.67	2.65	2.57	2.64	2.76	2.88	2.95	3.01
Guysborough, ,,	2.86			2.81			2.65			2.56			2.89		
Halifax, ,,	2.92	2.93	2.91	2.78	2.64	2.60	2.63	2.62	2.58	2.60	2.66	2.88	2.94	2.96	3.03
Charl'town,PEI.	2.91	2.92	2.89	2.79	2.59	2.53	2.58	2.60	2.59	2.61	2.70	2.77	2.87	2.94	3.01
Chatham, N.B.	2.93	2.84	2.77	2.66	2.43	2.39	2.51	2.61	2.64	2.71	2.66	2.74	2.86	2.94	3.05
Bathurst, ,,	2.90			2.58						2.65			2.82		
Father Point, Q.	2.88	2.72	2.52	2.36	2.25	2.29	2.48	2.58	2.64	2.67	2.70	2.72	2.81	2.93	3.03
Quebec, ,,	2.82	2.65	2.43	2.36	2.30	2.43	2.56	2.58	2.71	2.77	2.82	2.84	2.93	2.97	3.05
Montreal, ,,	2 84	2.58	2.57	2.49	2.50	2.59	2.67	2.75	2.84	2.93	2.96	3.02	3.09	3.08	3.14
Cornwall, Ont.	2.74			2.48			2.71			2.95			3.12		
Ottawa, "	2.76	2.56	2.57	2.51	2.60	2.63	2.75	2.82	2.90	3.00	3.01	3.13	3·15	3.11	3.16
Brockville, ,,	2.85	2.74	2.75	2.61	2.65	2.71	2.83	2.88	2.97	3.08	3.06	3.17	3.23	3.19	3.24
Kingston, ,.	2 · 81	2.72	2.70	2.60	2.67	2.69	2.76	2.82	2.91	3.04	3.00	3·11	3.22	3.21	3.20
Peterborough, ,,						ļ .			į .	.					
Toronto, "	2.71	2.73	2.64	2.62	2.61	2.72	2.84	2.92	2.99	3.10	3.06	3.13	3.50	3.50	3.21
Port Dover, ,,	2.77	2.81	2.69	2.66	2.64	2.74	2.85	2.90	3.00	3.11	3.04	3.12	3.23	3.21	3.20
Port Stanley, ,,	2.82	2.82	2.75	2.69	2.67	2.77	2.88	2.94	3 02	3.11	3.06	3.13	3.21	3·19	3.21
Windsor, ,,	2·91			2.73		١.	2.97			3.14			3.26		
Granton, ,,	2.80			2.68			3.00			3.12			3.23		
Stratford, "	2.80		.	2.69						3.14			3.25		
Goderich, "	2.81			2.70			2.94			3.13			3.24		
Kincardine, ,,	2.82	2.78	2.66	2.72	2.74	2 82	2.96	2.98	3.06	3.14	3.13	3.20	3.25	3.21	3.26
Saugeen, ,,	2.73	2.84	2.64	2.70	2.73	2.80	2.90	2.99	3.00	3.12	3.13	3.16	3.23	3 23	3.22
Stayner, ,,	2.68	2.67		2.61	2.65					3.03	3.07		3.19	3.18	
Little Current ,,	2.65			2.66			2.94			3.13			3.23		
Fort Garry, Man.	2.83	2.87	2.90	3.00	3.02	3.09	3.09	3.03	3.03	3.06	$\frac{1}{3.00}$	3.03	3.06	2.94	2.95

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations.	31.6	t Jul	у.	1st	Augu	st.	2nd	Aug	ust.	3rd	Augu	st.	4th	Augu	ıs t ,
Glace Bay, N.S.	68		•	62	0		69			65		•	65		
Sydney, ,,	67	72	54	62	61	60	68	68	63	64	67	56	67	66	52
Guysborough, ,,														.	
Halifax, ,,	69	69	66	63	67	63	63	67	61	67	69	54	64	67	52
Charl'town, PEI.	64	76	64	63	68	65	67	76	66	61	60	56	59	71	58
Chatham, N.B.	66	73	63	63	65	62	66	77	61	60	68	52	60	66	58
Eathurst, "	66			62						62			60		
Father Point, Q.	57	56	58	67	68	65	64	59	56	53	56	51	48	52	56
Quehec, ,,	65	66	65	64	67	63	61	69	55	56	60	54	60	75	60
Montreal, ,,	65	69	67	64	70	65	62	64	55	53	62	55	56	72	65
Cornwall, Ont.	66			64			61			57			62		١.
Ottawa, ,,	61	73	65	66	75	66	58	68	55	57	65	57	65	75	60
Brockville,	65	70	65	66	73	64	58	66	56	60	65	50	65	68	58
Kingston, ,,	63	71	66	68	73	66	59	70	56	57	68	54	61	62	59
Peterborough, ,,															
Toronto, "	71	79	68	68	77	62	62	65	52	57	68	58	62	70	56
Port Dover, "	70	71	70	70	80	64	60	74	55	54	70	57	55	69	62
Port Stanley, ,,	71	77	69	69	76	61	58	69	52	52	71	53	55	73	57
Windsor, ,,	72			72			62			62			60		
Granton, ,,	65			66			56			55			58		
Stratford, ,,	6 5			66						52			56		١.
Goderich, ,,	64			66	l .		61			59			62		
Kincardine, ,,	62	71	72	59	60	57	57	60	52	56	60	50	55	68	52
Saugeen, ,,	59	67	65	55	60	58	56	58	55	56	60	44	60	63	49
Stayner, ,,	62	73	١.	64	64					57	66		60	65	
Little Current ,,	65			66			57			62			66		
Fort Garry, Man.	54	67	59	58	69	55	48	73	61	55	78	65	57	72	62

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 30 p.m.

Greenwich

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	5th	Augr	ıst.	6th	Augu	ıst.	7th	Augu	ıst.	8th	Augu	ıst.	9th	Augu	18 t.
Glace Bay, N.S.	3.10	[.		2.96	,		2.77			3.08	,	,			
Sydney, ,,	3.07	3.12	3.10	2.99	2.62	2.43	2.81	2.98	3.06	3.13	3.17	3.21	3.14	3.06	2.99
Guysborough, ,,	3.06			2.88			2.90		.	3.12		[.	3.07		
Halifax, ,,	2.99	3.05	3.03	2.87	2.58	2.78	3.00	3.02	3.08	3.12	3.15	3.09	3.02	2.94	2.86
Charl'town, PEI.	3.13	3.15	3.11	3.03	2.77	2.77	2.95	2.97	3.03	3.08	3.08	3.10	3.01	2.97	2.91
Chatham, N.B.	3.19	3.13	3.14	3.17	2.95	2.92	2.98	2.88	2.94	3.01	2.96	3.00	2.97	2 97	2.93
Bathurst, ,,	3.17			3.13	,	,	2.90			2.94	\ ! '				
Father Point, Q.	3.16	3.06	3.13	3.13	3.03	3.04	2.90	2.84	2.80	2.84	2.81	2.82	2.87	2.76	2.77
Quebec, "	3.13	3.07	3.08	3.07	2.97	2.96	2.91	2.80	2.81	2.80	2.73	2.78	2.83	2.73	2 76
Montreal, ,,	3.50	3.11	3.11	3.10	3.00	2.99	2.95	2.84	2.84	2.80	2.76	2.82	2.86	2.79	2.79
Cornwall, Ont.	3.20			3.08			2.90	ļ .	١.	2.79		ļ .	2 86		
Ottawa, ,,	3.22	3.09	3.14	3.13	2.98	2.98	2.88	2.71	2.81	2.80	2.76	2.82	2.87	2.77	2.78
Brockville, ,,	3.29	3.17	3.18	3.18	3.07	3.07	2.99	2.88	2.90	2.88	2.83	2.90	2.93	2.86	2.88
Kingston, ,,	3.24	3.15	3.12	3.12	3.06	3.01	2.97	2.84	2.86	2.83	2 · 82	2.83	2.89	2.90	2.82
Peterborough, ,,					!		.								
Toronto, ,,	3.22	3.10	3.10	3.09	2.98	2.95	2.90	2.80	2.87	2.83	2.79	2.87	2.91	2.84	2.86
Port Dover, ,,	3 · 22	3.12	3.12	3.08	2.98	2.96	2.87	2.77	2.84	2.85	2.84	2 88	2.96	2.86	2.89
Port Stanley, "	3.21	3.12	3.11	3.07	2.98	2.96	2.87	2.79	2.83	2.84	2.83	2.92	2.96	2.90	2.91
Windsor, ,,	3.24			3.10			2.91			2.92			3.01		.
Granton, "	3.22			3.09			2 91].		2 86			2.96		
Stratford, ,,	3.24	.		3.10			2.92			2.87	•			ļ .	
Goderich, ,,	3.21			3.08			2.88) .		2.87			2 91		
Kincardine, ,,	3.24	3.23	3.14	3.10	2.96	2.95	2.85	2.85	2.89	2.89	2 86	2.96	2.94	1	2.90
Saugeen, .,	3.23	3.11	3.09	3.06	2.96	2.93	2.88	2.84	2.87	2.95	2.90	2.90	2.93	2.88	2 86
Stayner, ,,	3 18	3.06		3.06	2.92		2.85	2.77		2.80	2.84				
Little Current ,,	3.20			3.08			2.89			2.85			2.85		
Fort Garry, Mar	2.97	2.94	2.92	2.98	2.94	2.96	2.97	2.85	2.84	2.82	2.73	2.80	2.77	2 58	2.62

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich "

7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m.

Stations.	5th	Augu	st.	6th	Augu	st.	7th	Augu	st.	8th	Augu	st.	9th	Augu	st.
Glace Bay, N.S.	67	.		65	.	0	61	°		64	°	°	°	:	•
8ydney, ,,	67	58	54	58	55	55	56	67	58	64	69	59	63	64	60
Guysborough, .,				 1	.	. 1	
Halifax,	64 !	63	56	55	57	55	61	67	52	61	64	57	66	63	63
Charl town PEI.	61	60	54	57	55	55	60	73	64	65	67	62	63	68	65
Chatham, N.B.	61	65	51	56	59	55	60	77	63	62	63	58	63	67	65
Bathum	62			59			68			64					
Pather Point, Q.	56	55	55	57	64	59	60	55	57	58	61	65	68	65	64
Queboo	64	66	58	61	67	57	64	68	62	65	77	65	70	81	68
Monte	66	75	63	65	72	65	64	68	64	66	75	67	64	78	70
Cornwall, Ont.	6 8			70			63	0.7	01	69		,	66		•
Ottawn			62	61	83	64	60	74	67	63	85	69	63	89	73
Brooken	65 68	81 73	58	64	74	59	64	74	66	65	79	65	71	81	69
Kinomton							66	72	68	68	75	67	69	75	69
Peterborough, ,,	63	73	60	68	74	62	00		90	000	15				
Toronto, ,,	•				•			,	•				,	81	
Port Dover, ,,	65	73	58	63	69	65	65	75 	64	68	79	64	72	82	68
Port St.	58	73	61	63	73	64	67	79	64	63	73	67	64	82 79	71
Port Stanley, ,, Windsor, ,,	55	70	59	61	74	62	66	77	65	65	82	64	61	79	68
Granton, ,,	61	.		61	•	•	68			67			69	•	٠
Stratford, ,,	60		•	59	•	•	62		•	65	•	•	64		•
God	59		٠.	61	•	٠.	63		١٠	63				. '	٠.
Goderich, "	63	٠.		62		١.	70			67	! . 		75		•
Kincardine, "	60	62	60	63	69	63	66	68	60	63	73	59	66	75	6
Sangeen,	59	66	58	67	68	57	68	66	55	63	71	57	69	74	6
Stayner, ,,	66	70		64	74	•	71	73			68	73			
Little Current ,,	70		.	65	.		71			72	į .		77		
Fort Garry, Man.	57	75	68	57	79	62	55	84	67	60	85	67	58	88	6

Table I.—Barometer at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

10 50 p.m.

Greenwich ,,

0 43 p.m.

4 25 p.m. 9 43 p m.

4 08 a.m. (of next day.)

Stations.	101	h Aug	æt.	11 t l	Aug	nst.	12t	h Aug	ust.	13t	h A n g	u st.	14t	h Aug	ust.
Glace Bay, N.S.	2.89			2 90			3.04			2.86		1.	3.14		
Sydney, "	2.89	2.84	2.84	2.91	3.03	3.07	3.08	3.02	2.97	2.91	3.00	3.15	3.14	3.13	3.09
Guysborough, ,,	2.83			2.91			3.07	١.		2.90			3.11		
Halifax, N.S.	2.77	2.71	2.89	2.94	3.04	3.07	3.12	3.01	2.93	2.94	2.99	3.65	3.09	3.05	3.04
Charl'town, PEI.	2.80	2.73	2.77	2.96	3.03	3.06	3.06	2.94	2.89	2.91	3.07	3· 16	3.17	3.12	3.08
Chatham, N.B.	2.87	2.79	2.85	3.03	2.93	2.97	2.98	2.81	2.79	2.97	3.11	3.20	3.20	3.13	3.10
Bathurst, ,,	2·87	.		2.96			2.90			2.99		.	3.22		
Father Point, Q.	2.82	2.79	2 82	2.91	2.83	2.84	2.81	2.67	2.84	3.03	3.09	3.16	3.21	3.10	3 .96
Quebec, ,,	2.79	2.73	2.82	2.91	2.88	2.30	2.84	2.71	2.77	2.96	3.01	3.08	3.10	3.01	3.01
Montreal, ,,	2.79	2.77	2.90	3.00	2.95	2.94	2.80	2.73	2.82	3.00	3.05	3.10	3.12	3.06	3.05
Cornwall, Ont.	2.81			3.07] .	.	2.83			3.02			3.10		
Ottawa, "	2.76	2.78	2.92	2.99	2.91	2.92	2.83	2.66	2.90	3.04	3.05	3.11	3.12	3 13	3.12
Brockville, "	2.91	2.91	2.97	3.05	3.00	3.01	2.92	2.79	2.86	3.08	3.13	3.16	3.19	3.12	3.14
Kingston, ,,	2.88	2.86	2.91	3.02	2.99	2 97	2.89	2.76	2.89	3.04	3.07	3.08	3.1≰	3.08	3.09
Peterborough, "	2.86			3.00			2.84	.		3.05			3.11		
Terento, "	2.84	2.82	2.89	2.95	2.91	2·87	2.81	2.79	3.61	3.08	3.06	3.10	3.14	3.07	3.10
Port Dover, ,,	2.84	2.84	2 89	2.93	2.89	2.89	2.86	2.83	3.02	3.09	3.03	3.11	3.12	3.06	3.10
Port Stanley, "	2·81	2.84	2.90	2 92	2.88	2.88	2.86	2.87	3.03	3.11	3.07	3.69	3.11	3.07	3.11
Windsor, "	2.87	.		2.91			2.90		·	3.11,			3.16	.	.
Granton, "	2.84	.		2.92			2.84			3.21			3.12	.	ļ .
Stratford, ,,	2.86			2.96			2.85			3.11	.		3.17	١.	
Goderich, "	2.84			2.91		į .	2.93			3.12	•		3.18		
Kincardine, ,,	2.86	2.83	2.91	2.93	2.81	2.81	2.88	3.00	3.07	3.14	3.14	3.18	3.19	3.14	3.18
Saugeen, ,,	2.81	2.91	2.88	2.93	2.81	2.78	2.83	2.96	3.16	3.13	3.11	3.15	3.25	3.10	3.13
Stayner, ,,	2.80	2.78	.	2.91	2.83		2.74	2 89		3 11	3 10		3 14	3 07	·
Little Current,,	2.83			2.90			2.80			3.22			3.20		.
Fort Garry, Man.	2.62	2.59	2.68	2.77	2.86	2.94	3.10	3.18	3.22	3.29	3.19	3.19	3.19	3.03	2.99

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m. 0 43 p.m. Greenwich ,,

Stations.	10tl	'Aug	ust.	11tl	a Aug	ust.	12tl	Aug	ust.	13tl	Aug	ust.	14t}	Aug	ust.
Glace Bay, N.S.	62	•		65		°	75		 °	74	•		58	.	•
Sydney, "	63	66	61	64	69	61	75	73	66	73	61	57	58	58	5
Guysborough, ,,		. '			,									.	
Halifax, ,,	61	61	58	67	72	58	68	72	64	65	71	63	59	60	5
Charl'town, PEI.	67	69	64	63	73	66	68	77	66	65	59	58	56	61	5
Chatham, N.B.	64	66	63	67	83	70	74	79	68	60	61	55	60	62	5
Bathurst, ,,	64			69			76			59			62	.	
Father Point, Q.	63	66	62	57	59	62	64	71	68	59	61	60	58	66	6
Quebec, ,,	70	72	68	67	83	71	76	78	69	63	66	64	60	68	5
Montreal, ,,	72	84	71	72	84	74	72	83	69	62	72	62	61	71	6
Cornwall, ,,	73			75			80			65			63		
Ottawa, ,,	74	86	63	63	85	70	72	89	67	63	78	63	62	79	e
Brockville, "	72	73	64	75	81	70	76	86	75	62	69	59	65	73	5
Kingston, ,,	71	73	72	68	78	71	73	83	76	63	74	62	63	76	e
Peterborough, ,,	65			64	١.		83	.		71			76		
Toronto, "	70	76	62	67	74	71	78	90	67	65	74	62	63	73	ě
Port Dover "	70	74	69	70	85	74	75	90	70	60	77	62	59	80	e
Port Stanley, ,,	71	71	64	70	84	75	76	84	67	60	72	61	60	77	ð
Windsor, "	72			76			81			66			63		١.
Granton, ,,	67			71	. [80	. {		60			58		.
Stratford, ,,	67			67			78			61			57		
Goderich, ,,	71			65			79			67			56		١.
Kincardine, ,,	67	74	64	68	88	80	76	68	63	61 .	65	58	60	64	Ę
Sangeen, ,,	70	72	60	68	84	78	74	68	59	59	65	53	56	65	4
Stayner,	72	78		69	86		84	75		60	6 8		58	73	 ¦ .
Little Current ,,	73			73			74			53			64		.
Fort Garry, Man.	50	83	-66	60	68	62	55	68	60	49	73	59	53	79	١,

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich 0 43 p.m. 4 25 p.m. 9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

Stations.	15 t]	a Aug	ust.	16t)	Aug	ust	17t]	n Aug	ust.	18t1	h Aug	ust.	19t	h Aug	ust.
Glace Bay, N.S.	2.96	.	 	2·87			3.26			3·p8		 	2.90	 •	
Sydney, ,,	2.99	2.83	2.85	2.91	3.07	3.20	3 31	3.24	3.22	3.11	2.89	2.83	2.92	3.03	3.10
Guysborough, ,,	2.93			2.93			3.29			3.07			2.94	:	
Halifax, ,,	2.90	2.85	2.88	2.98	3.07	3.21	3.30	3.23	3.19	3.05	2.88	2.86	3.00	3.04	3.08
Charl'town, PEI.	2.97	2.91	2.93	3.00	3.13	3.22	3.28	3.16	3.13	3.05	2.85	2.85	3.02	3.07	3.08
Chatham, N.B.	3.07	2.90	2.94	3.07	3.15	3.22	3 26	3.01	3.00	2.95	2.81	2.90	3.11	3.02	3.02
Bathurst, ,,	3.02						3.18			2.89			3.06		
Father Point, Q.	3.00	2.96	3.01	3.11	3.10	3.11	3.04	2.95	2.85	2.81	2.80	2.92	3.08	3.10	2.94
Quebec, ,,	2.99	2.88	3.04	3.14	3.09	3.12	3.06	2.87	2.83	2.84	2.87	3.03	3.15	3.07	3.01
Montreal, ,,	3.05	2.99	3 07	3.19	3.12	3.13	3.13	2.94	2.92	$ _{2.92}$	2.87	3.11	3.24	3.13	3.02
Cornwall, Ont.	3.05			3.15			3.09			2.93			3.22		
Ottawa, ,,	3.07	3.01	3.10	3.19	3.06	3.10	3.10	2.89	2.90	2.97	3.00	3.12	3.22	3.14	2.99
Brockville, "	3.15	3.10	3.12	3.23	3.16	3.19	3.19	3.03	3.01	3.07	3.09	3.18	3.31	3.22	3.08
Kingston, "	3.11	3.07	3·11	3.19	3.14	3.09	3.16	3 01	2.99	3.08	3.09	3.19	3.28	3.16	3.01
Peterborough, ,,	3.18	١.					3.12			3.13			3.33		
Toronto, "	3.11	3.06	3.11	3·15	3.08	3.09	3.09	2.94	2.95	3.10	3.11	3.19	3.25	3.08	3.02
Port Dover, ,,	3.13	3.05	3.09	3 16	3.09	3.11	3.12	2.98	2.97	3.15	3.12	3.19	3.25	3.06	3.00
Port Stanley, "	3.13	3.06	3.12	3.15	3.08	3.10	3.11	3.01	3.00	3.13	3.13	3.18	3.24	3.06	3.01
Windsor, "	3.20			3.19		Ţ.	3.13			3.19			3.21		.
Granton, ,,	3.16			3.17			3.09			3.14			3.25		
Stratford, ,,	3.17	١.					3.11			3.17	į .	١.	3.29		•
Goderich, "	3.17			3.15			3.09			3.18			3.22	.	
Kincardine, "	3 19	3.13	3.19	3.16	3.04	3.08	3.07	2.92	3.06	3.18	3.11	3 21	3.23	2.95	2.86
Saugeen, "	3.15	3.13	3.12	3.26	3.05	3.03	3.03	2.89	3.02	3.25	3.19	3.18	3.23	2.91	2.91
Stayner, "	3.11	3.06					3.03	2.85		3.06	3.12		3.24	2.95	
Little Current ,,	3.15			3.13			2.92			3.13			3.17		
Fort Garry, Man.	2.93	2.80	2.81	2.94	2.92	2.94	3.05	3.05	3.04	3.06	2.90	2.91	2.85	2.89	3.00

TABLE 11.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich ,,

0 43 p.m.

4 25 p.m. 10 50 p.m. 9 43 p.m. 4 08 a.m.

4 08 a.m. (of next day.)

Stations.	15th	Augu	st.	16th	Augu	ıst.	17th	Augu	ıst.	18th	Augu	st.	19th	Augu	ıst.
Glace Bay, N.S.	59	.	•	62	.	0	62	,	•	68	0	1	65	.	•
Sydney, ,	59	61	57	61	62	47	64	66	56	69	72	64	68	66	48
Guysborough, ,, }	
Halifax, ,,	60	65	56	63	69	54	63	65	57	63	65	61	64	69	53
Charl'town, PEI.	59	59	55	60	65	56	61	75	61	63	77	65	62	74	61
Chatham, N.B.	59	72	54	61	70	52	60	76	59	61	63	58	61	75	58
Bathurst, ,,	62	.	,		ı .		58			57			62	١. إ	
Father Point, Q.	60	59	58	55	56	55	66	68	70	56	59	56	54	58	56
Quebec, ,,	65	75	60	63	74	63	65	80	71	69	74	60	62	69	64
Montreal, ,,	64	78	67	63	78	66	65	81	69	68	77	64	64	70	63
Cornwall, Ont.	69	.		68			77			69			63		
Ottawa, ,,	60	78	64	62	81	66	65	85	76	70	75	61	56	73	63
Brockville, ,,	65	77	60	69	78	63	72	80	73	70	76	63	69	70	66
Kingston, ,,	64	74	63	63	73	68	69	78	71	68	77	63	64	68	70
Peterborough, ,,	59	١.					64		١.	68			61		[
Toronto, ,,	62	76	64	64	76	64	69	81	69	68	76	59	59	71	67
Port Dover, "	57	77	68	60	76	65	70	81	71	64	75	60	57	82	74
Port Stanley, ,,	55	78	59	 55	77	59	67	80	69	63	81	57	55	79	75
Windsor, "	63			64			68	١.		69		١.	70		
Granton, "	57			57	! ! .		71		١.	66			60		! .
Stratford, ,,	56			.′	١.		67			63	١.	١.	55		
Goderich, "	62	.		64	١.		70		١.	60	١.	١.	62	١.	١.
Kincardine, ,,	54	65	52	59	76	67	69	81	67	62	70	57	64	80	76
Saugeen, "	58	67	50	57	73	63	70	80	63	65	67	53	59	82	76
Stayner, "	67	76					72	85		66	70	١.	58	80	
Little Current ,,	66			72			72			66	.	.	65		
Fort Garry, Man.	68	76	66	60	66	54	49	69	55	50	68	60	61	75	58

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

4 08 a.m. (of next day.)

Stations.	20t	h Aug	ust.	21st	Aug	ust.	22n	d Aug	us t.	23re	l Aug	ust.	24t]	h Aug	ust.
Glace Bay, N.S.	3.04			2.76					.	2.83			2.94	ĺ.	
Sydney, "	3.05	2.94	2.87	2.80	2.75	2.77	2.76	2.72	2.78	2.84	2.92	3.01	2.96	2.88	2.93
Guysberough, ,,	3.03			2.78			2.76	٠.		2.88	١.		2.91		
Halifax, ,,	3.04	2.87	2.81	2.85	2.76	2.78	2.80	2.73	2.85	2.95	2.94	2.99	2.93	2.87	3.0
Charl'town, PEI.	3.03	2.90	2.82	2.83	2.77	2.80	2.82	2.76	2.95	2.91	2.92	2 ·98	2.95	2.95	3 0
Chatham, N.B.	3.00	2.80	2·80	2.87	2.74	2.81	2.85	2.80	2.86	2.96	2.89	2.93	2.98	2.95	2 · 9
Bathurst, ,,	2.91			2.77			2.80				1 .		2.97		
Father Point, Q.	2.83	2.74	2.77	2.86	2.79	2.84	2.84	2.85	2.90	2.95	2.91	2.87	2.98	3.02	3.0
Quebec, ,,	2 81	2.80	2.86	2.91	2.85	2.90	2.94	2.90	3.00	3.02	2.91	2.94	3.08	3.00	3.0
Montreal, ,,	2.83	2.86	2.97	2.98	2.94	2.91	3.01	3.01	3.06	3.10	2.97	2.96	3.02	3.05	3.1
Cornwall, Ont.	2 84			2.99		!	2.99			3.08	١		2.93		
Ottawa, "	2.84	8.89	3.01	3.11	2.95	2.93	3.05	3.06	3.00	3.01	3.05	3.04	3.04	3.02	3.1
Brockville, "	2.96	2.96	3 06	3.11	3.00	2.99	3.08	3.12	3.12	3.17	3.04	3.05	3.11	3.09	3.1
Kingston, "	2.96	2.96	3.06	3 07	3.00	2.96	3.07	3.07	3.15	3.12	3.01	3.01	3.07	3.07	3.1
Peterborough, ,,	2.98	.		3.08			3.11			١.,	į .		3.05		
Toronto, "	2.95	2.93	3.00	2.99	2.88	2.92	3.02	3.05	3.08	3.04	2.95	2.98	3.04	3.05	3.1
Port Dover, "	2.98	2.96	3.02	3.00	2.80	2 90	3 00	3.03	3.04	3.02	2.92	2.95	3.03	3.02	3.0
Port Stanley, "	3.01	2.98	3.02	3.00	2.85	2.89	2.99	3.00	3.09	3.00	2.90	2.95	3.03	3.04	3.0
Windsor, ,,	3.05			2 99			2.97			2.98	.	1.	3.02	,	
Granton, ,,	2 98	.		2.99			3.02			3 02			3.02		۱.
Stratford, ,,	3 02			3.00			3 05				.	.	3.07	.	.
Goderich, ,,	3.17			3 02			3 06			3.00			3.05		
Kincardine, ,,	2 98	3 00	3.07	3 04	2.90	2 97	3 07	2.99	3.10	3.03	2.97	3.00	3.07	3.08	3.1
Saugeen, "	2.93	2.97	3.14	3.02	2.91	2.94	3.05	3.06	3.09	3.05	2.97	2.99	3.05	3.07	3.1
Stayner, ,,	2, 91	3.00	١.	3.04	2.89	į .	3.06	3.05				.	3.00	3.03	
Little Current ,,	2 90	! .		3 04	.		3.17	.	.	3 06			3.07		
Fort Garry, Man	3.05	2.98	2.96	13.00	3.02	3.09	3 12	3.02	3.03	3 03	2.98	3.02	3.08	2.96	3.0

Table II.-Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. 0 43 р.т. Greenwich "

10 50 p.m. 4 08 a.m. (of next day.) 4 25 p.m. 9 43 p.m.

Stations.	20th	Augu	st.	21st	.\ugu	st.	22nd	Augu	st.	23rd	Augu	ıst.	24th	Augu	st.
Glace Bay, N.S.	66	.		63		0	.		°	59	0)		60		9
Sydney, ,,	63	62	59	62	65	56	64	61	46	56	62	47	60	60	5 0
Guysborough, .,			.	. :	:		. \	.	
Halifax, ,,	60	59	60	64	70	61	59	65	52	61	61	51	ŏ 6	65	81
Charl'town, PEI.	63	61	59	62	69	58	58	66	52	56	70	55	57	64	51
Chatham, N.B.	60	59	56	64	68	51	53	62	49	55	66	45	56	65	50
Bathurst, ,,	62	.	.	66	. ¦	.	.	.		57			5 5		
Father Point, Q.	54	56	55	51	53	52	51	55	52	55	56	52	54	56	5
Quebec, "	58	65	60	62	64	52	52	60	52	51	64	53	55	64	54
Montreal, ,,	66	75	64	63	64	59	56	66	56	56	66	58	55	68	57
Cornwall, Ont.	66			64			58			54			56	.	
Ottawa, ,,,	66	76	63	62	63	59	56	67	53	50	67	53	54	71	6:
Brockville, ,,	67	78	66	63	62	58	56	65	48	51	66	53	49	68	6
Kingston, ,,	69	77,	65	63	61	59	58	68	55	52	67	56	58	70	5
Peterborough, ,,	70			64			60	,					60		
Toronto, ,,	72	82	69	68	64	61	62	70	58	5 8	67	59	60	70	5
Port Dover, ,,	\76	83	71	66	76	62	61	72	61	60	69	57	56	76	5
Port Stanley, ,,	72	82	70	68	74	64	61	76	62	61	76	56	55	71	5
Windsor, ,,	76		•	72	١		65		! !	67			63	. !	١.
Granton, ,,	74			65			59	1	Ì .	58	ì		57		.
Stratford, ,,	68] .		67		.	58					: .	5 6		١.
Goderich, "	70			64			61		,	63			62		
Kincardine, "	70	72	63	63	64	59	61	66	58	59	64	58	61	65	5
Saugeen, "	69	64	61	65	61	60	59	66	50	54	65	51	53	64	5
Stayner, "	71	71		63	61		60	68					59	71	ļ.
Little Current ,,	68			62			52			61			61		
Fort Garry, Man.	56	70	65	56	76	56	51	74	63	58	72	62	52	80	

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

10 50 p.m.

0 43 p.m. Greenwich "

4 08 a.m. (of next day.)

The Height of the Barometer=27 inches + the numbers in the Table.

Stations.	25t1	Aug	ust.	26tl	Aug	ust.	27t]	Aug	ust.	28tl	n Aug	ust.	29tl	h A ug	ust.
Glace Bay, N.S.	3.12	,		3.33			3·16			3.13			3.14		
Sydney, ,,	3.14	3 · 27	3.34	3.37	3.26	3·19	3.18	3.16	3.15	3.18	3.13	3.17	3.17	3.13	3.11
Guysborough, ,,	3.16			3.32			3.14			3.13			3.11		
Halifax, ,,	3.17	3.23	3· 2 8	3.28	3.16	3.17	3.21	3.15	3.13	3.12	3.09	3.05	3.02	3.03	2.94
Charl'town, PEI.	3.20	3.30	3.33	3.37	3.27	3.24	3.26	3.19	3.18	3·18	3.14	3.12	3.10	3.04	3.02
Chatham, N.B.	3.29	3.25	3.30	3.41	3.24	3.25	3 · 29	3.17	3.17	3·19	3.09	3.13	3.14	3.04	3.01
Bathurst, ,,	3.24			3.38			3.27			3.14			3.14		
Father Point, Q.	3.53	3.23	3.25	3.31	3.20	3.20	3.23	3.14	3.09	3.12	3.04	3.05	3.08	3.01	2.95
Quebec, ,,	3.22	3.16	3.20	3.26	3.17	3.50	3.23	3.10	3.11	3.13	3.04	3.04	3.04	2.89	2.89
Montreal, ,,	3.23	3.20	3.22	3.28	3.19	3.21	3.26	3.15	3.15	3.17	3.09	3 07	3.07	2.93	2.89
Cornwall, Ont.	3.18	! .		3.24		•	3.23	.		3.17		.	3.07		i
Ottawa, "	3.50	3.16	3.20	3 27	3·16	3·19	3.24	3.08	3.16	3.13	3.08	3.08	3.06	2.92	2.92
Brockville, "	3.26	3.23	3.24	3.34	3.25	3.25	3.19	3.20	3.21	3.24	3.14	3.15	3.13	3.01	2.99
Kingston, ,,	3.21	3.20	3.21	3.28	3.24	3.25	3.25	3.18	3.18	3.23	3.13	3 13	3.10	2.99	2.94
Peterborough, ,,	3.20			3.21			3 22			3 22			3 14	٠.	
Toronto, ,,	3.16	3.14	3.19	3.23	3.16	3.18	3.21	3.13	3.14	3.17	3.09	3.08	3.06	2.91	2.89
Port Dover, ,,	3.19	3.12	3.16	3.22	3.12	3.16	3.20	3.10	3.13	3.17	3.05	3.07	3.09	2.93	2.90
Port Stanley, ,,	3.15	3.13	3.17	3.21	3.12	3.15	3.17	3.10	3.10	3.13	3.05	3.05	3.05	2.93	2 · 92
Windsor, ,,	3.19			3.24			3.15	.		3.10	.		3.02	.	.
Granton, ,,	3.17			3.24			3.19			3.17			3.06		٠.
Stratford, ,,	3.19	.		3.26			3.22	.		3.20			3.08	.	;
Goderich, ,,	3.17	.	.	3.23			3.17			3.14			3.08		
Kincardine, ,,	3.18	3.16	3.19	3.23	3.18	3.17	3.12	3.11	3.13	3.16	3.08	3.08	3.05	2.95	2 9
Saugeen, "	3.18	3.19	3.19	3.22	3.14	3.13	3.19	3.07	3.13	3.17	3.05	3.04	3.06	2.97	2.9
Stayner, ,,	3.18	3.13		3.24	3.12		3.18	3.10		3.17	3.05		3.06	2.90	٠.,
Little Current ,,	3.20		.].			3.18],.		3.16			3.05		
Fort Garry, Man	3.06	2.95	2.94	2.87	2.83	2.86	2.84	2.81	2.71	2.64	2.49	2.46	2.69	2.90	3.0

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich "

0 43 p.m.

4 25 p.m. 9 43 p.m.

				•			1								
Stations.	25t]	h A ug	ust.	26t	h Aug	ust.	27tl	h A ug	ust.	28t	h Aug	ust.	29t	h Aug	us t.
Glace Bay, N.B.	e 60	•		\$ 58	°.		59		ı°.	Q	°	°	61		:
Sydney, "	61	59	46	57	56	53	60	60	50	59	61	56	60	63	62
Guysborough, "] .	 .			. \] ,
Halifax, "	61	64	54	57	62	52	59	59	55	62	61	56	61	63	63
Charl'town, ,,	58	62	52	57	64	53	60	65	64	59	66	57	62	74 -	67
Chatham, N.B.	56	62	48	55	69	47	54	68	48	56	78	52	61	64	60
Bathurst, ,,	57			56			58			59			61		
Father Point, Q.	54	58	55	55	55	56	54	56	56	55	56	54	55	55	50
Quebec, ,,	56	72	53	60	75	56	61	78	60	63	80	66	66	80	64
Montreal, ,,	56	69	60	59	74	62	60	73	6 5	65	80	70	63	79	69
Cornwall, Ont.	59	,		63			63			64			62		
Ottawa, ,,	66	72	59	60	77	63	56	81	61	58	82	63	57	80	60
Brockville, ,,	65	72	59	64	71	58	69	78	63	68	79	67	61	77	62
Kingston, ,,	63	71	62	65	73	60	66	74	60	64	75	65	66	71	61
Peterborough, ,,	58	,		61			64			60	. :] .	61		
Toronto, ,,	59	73	62	64	73	61	65	73	62	64	75	62	65	77	62
Port Dover, "	57	78	57	58	78	57	57	81	60	57	83	65	58	82	62
Port Stanley, ,,	59	73	54	54	73	56	55	77	66	67	77	60	60	76	55
Windsor, ,,	61			62			66			64			67		
Granton, "	57		,	57			- 60			59) .		60		
Stratford, ,,	57			54			57			56			57		
Goderich, "	62			61			64			66			66		
Kincardine, ,,	55	70	53	62	69	59	61	71	58	61	71	61	60	75	57
Saugeen, ,,	52	67	52	56	69	57	59	68	55	60	68	56	61	69	54
Stayner, ,,	56	74		61	71		60	78		58	79		59	75	
Little Current ,,	61		,	۱. ۱			68	.		68			70	.]	
Fort Garry, Man.	55	80	66	64	72	64	60	68	67	66	67	66	62	71	56

Table I.—Barometer at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 10 50 p.m. 9 43 p.m. 4 08 a.m. 4 08 a.m. (of next day.)

Stations.	30t1	ı Augu	ıst.	31st	Aug	ust.	1st S	Septen	aber.	2nd S	Septen	aber.	3rd S	Septem	ber.
Glace Bay, N.S.	3.03	.		2.92			2.77			2.67			2.82		
Sydney, "	3.05	2•94	2.93	2.94	2.86	2.86	2.77	2.69	2.68	2.68	2.73	2.77	2.83	2.82	2.78
Guysborough, ,,	2.97			2.93			2.73			2.64	,	2.86			
Halifax, ,,	2.90	2.86	2.93	2.96	2·89	2.86	2.77	2.71	2.69	2.73	2.79	2.85	2.91	2.83	2.79
Charl'town, PEI.	2.93	2.83	2.90	2.92	2·85	2.83	2.77	2.75	2.74	2.75	2.83	2.87	2.92	2 76	2.80
Chatham, N.B.	2.90	2.82	2.85	2.87	2.78	2.79	2.82	2.77	2.81	2.92	2.88	2.93	2.90	2.61	2.84
Bathurst, ,,				2.80			2.78			2.90			2.85		
Father Point, Q.	2.91	2.76	2.73	2.70	2.79	2.84	2.80	2.77	2.92	2 96	2.92	2.90	2.72	2.82	2.97
Quebec, "	2.86	2.80	2.80	2.83	2.87	2.95	2.93	2.85	2.91	2.97	2.86	2.87	2.75	2.91	3.05
Montreal, ,,	2.89	2.82	2.87	2.94	2.98	3.08	3.11	3.02	3.04	3.08	2.93	2.89	2.81	3.02	3.17
Cornwall, Ont.	2.88			3 04		,	3.13			3.07			2.81		
Ottawa, "	2.92	2.77	2.89	3.01	3.02	3.15	3.23	3.10	3.10	3.07	2.89	2.89	2.81	3.11	3.21
Brockville, ,,	2.99	2.90	2.96	3.05	3.08	3.16	3.25	3.14	3.14	3.18	3.04	3.02	2.91	3.17	3.27
Kingston, ,,	2.96	2 88	2.96	3.00	3.03	3.14	3.29	3.17	3.17	3.12	3.00	2.98	2.91	3.16	3.27
Peterborough, ,,			.	3.09	į .		3.24			3.16			2.89	١.	
Toronto, ,,	2.89	2.86	2.92	3.01	3.03	3.16	3.25	3.18	3.16	3.13	2.97	2.94	2.90	3.13	3.23
Port Dover, "	2.94	2.88	2.94	3.04	3.05	3.15	3.27	3.18	3.17	3.16	3.03	2.97	2.94	3.12	3.22
Port Stanley, ,,	2.93	2.89	2.95	3.04	3.05	3.16	3.24	3.17	3.18	3.18	3.05	2.99	2.97	3.12	3.20
Windsor, ,,	2.91			3.11		ļ.	3.29			3.19			3.03] .	
Granton, "	2.93	.		3.06			3.25			3.18			2.98		
Stratford, ,,		1 .		3.08			3.28			3.17			2.99	١.	
Goderich, "	2.90	1.		3.07			3.25	.	.	3.14		} .	3.02		
Kincardine, "	2.91	2.91	2.99	3.08	3.17	3.22	3.27	3:19	3.16	3.14	2.98	2.92	3.02	3.17	3-24
Saugeen, ,,	2.89	2.89	3.05	3.10	3.19	3.24	3.37	3.21	3.15	3.13	3.03	2.99	2.99	3.17	3.23
Stayner, ,,		1.		3.05	3.13	.	3.27	3.16	.	3.14	2.94		2.97	3.16	.
Little Current ,,	2.92			3 14	.	.	 3+25			3.07			3.11		
Fort Garry, Mar	1. 3.07	2.97	2.96	2.81	2.74	2.81	2.87	3 00	3.14	3.26	3.23	3.24	3.17	2.96	2.94

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich "

7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m.

Stations.	30tl	a Aug	ust.	31st	Aug	ust.	1st S	lepten	ber.	2nd f	Septer	nber.	3rd S	septen	ber,
Glace Bay, N.S.	60	•	۰	67	•	ı °	67			59	•	•	58	ů	•
Sydney, ,,	66	6 8	64	69	70	57	64	65	60	58	58	58	59	61	58
Guysborough, ,,	66			65			63			56			59		
Halifax, ,,	63	65	57	59	63	58	60	64	53	56	62	58	63	63	6L
Charl'town, PEI.	69	70	63	62	71	62	61	60	54	59	57	58	57	66	56
Chatham, N.B.	60	67	63	60	71	63	58	55	53	53	64	54	57	69	49
Bathurst, ,,				63			58	.		56			57		
Father Point, Q.	51	53	51	52	50	48	50	52	50	51	54	53	59	56	53
Quebec, ,,	60	63	60	64	65	59	54	71	60	60	74	61	65	52	45
Montreal, ,,	69	77	63	63	73	63	61	76	66	67	76	66	65	54	51
Cornwall, Ont.	66			64			60			64			67		
Ottawa, ,,	58	83	69	66	76	58	60	79	68	67	82	65	68	56	47
Brockville, "	65	7 6	65	68	75	62	70	76	69	67	75	67	68	51	44
Kingston, ,,	67	7 5	63	65	74	62	65	81	64	66	72	68	69	53	47
Peterborough, ,,				66			63			64			67		
Toronto, ,,	66	75	68	65	80	62	65	75	58	65	78	68	68	61	51
Port Dover, ,.	55	79	62	60	77	66	58	80	60	57	77	68	71	62	53
Port Stanley, ,,	52	74	62	57	74	59	57	74	59	54	78	69	67	61	49
Windsor, ,,	64			63			61		,	63			68		
Granton, ,,	57			60		\ ·	58			58			62		
Stratford, ,,				60			57			57			62		
Goderich, ,	68			64			62			67			60		
Kincardine, "	69	70	63	-63	63	59	56	69	57	63	82	74	60	57	46
Saugeen ,,	58	67	60	60	63	50	54	69	53	61	77	73	58	56	41
Stayner, ,,				64	68		61	74	i J	61	81		59	57	
Little Current ,,	62			58		1	70			73			50		
Fort Garry, Man.	50	76	56	65	75	65	61	63	53	43	61	48	45	76	57

TABLE I.--Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. 4 25 p.m. 10 50 p.m. Greenwich ,, 0 43 p.m. 9 43 p.m. 4 08 a.m. (of next day.)

Stations,	4th 8	Septem	ber.	5th S	Septem	ber.	6th S	Septen	ber.	7th S	Septen	iber.	8th S	Septen	iber.
Glace Bay, N.S.	2.93			3.28		,	3.23	.		2·89			2·71	.	
Sydney, ,,	2.97	3.17	3.28	3.33	3.30	3.31	3.28	3.12	3.05	2.89	2.85	2·34	2.72	2.86	2.97
Guysborough, ,,	2.98	.		3.32	.		3 · 25			2.76			2.76		
Halifax, ,,	3.06	3.18	3.28	3.36	3.33	3.30	3· 2 5	3.11	3.00	2.66	2.51	2.70	2.78	2.84	2.98
Charl'town, PEI.	3.08	3.21	3.27	3.31	3· 2 8	3.30	3.24	3.07	3.00	2.88	2.48	2.66	2.81	2.93	3.03
Chatham, N.B.	3.19	3.13	3.20	3.32	3.17	3.17	3.15	3.00	2.96	2.86	2.66	2.71	2.83	2.97	3.04
Bathurst, ,,	3.12	.		3.23						2.84			3.11		
Father Point, Q.	3.14	3.15	3.09	3.15	3·11	3.04	2.93	2.93	2.86	2.83	2.78	2.81	2.92	3.00	3.05
Quebec, "	3.24	3.13	3.19	3.25	3.09	3.03	2.96	2.89	2.87	2.86	2.82	2.87	2 91	2.96	3.05
Montreal, ,,	3.30	3.23	3.24	3.26	3.11	3.03	3.00	2.96	2.96	2.99	2.95	2.97	3.00	2.98	3.09
Cornwall, Ont.	3.27	.		3.22			3.00			3.02			2.99		
Ottawa, "	3.34	3.21	3.22	3.24	3.05	3.02	3.00	2.97	3.02	3.07	2.96	2.99	3.01	2.97	3.16
Brockville, "	3.40	3.28	3.29	3.28	3.12	3.07	3.15	3.07	3.07	3.14	3.07	3.08	3.07	3.04	3.11
Kingston, ,,	3.34	3.29	3.28	3.22	3.06	3.67	3.15	3.06	3.06	3.13	3.04	3.08	3.07	3.07	3.14
Peterborough, ,,	3.32			3.17] .] .	3.14			3.01	į .	
Toronto, ,,	3.30	3.19	3.13	3.10	2.95	2.98	3.10	3.63	3.06	3.12	3.01	2.99	2.99	2.99	3.06
Port Dover, ,,	3.28	3.16	3.14	3.08	2.98	3.04	3.14	3.06	3.09	3.13	3.03	2.99	2.99	2.97	3.07
Port Stanley, ,,	3.23	3.15	3.13	3.04	2.98	3.06	3.13	3.08	3.09	3.11	3.04	3.02	3.00	2.95	3.06
Windsor, ,,	3.24			3.01			3.17		.	3.11		.	3.10		
Granton, ,,	3.27			3.04			3.13			3.11			3.02	j .	•
Stratford, ,,	3.31			3.06					.	3.15			3.06	.	į .
Goderich, ,,	3.58			2.98			3.10		.	3.09	<u>;</u> ,		3.01		1
Kincardine, "	3.30	3.17	3.10	2.97	2.87	2.99	3.10	3.06	3.20	3.10	2.97	2.97	3.03	3.02	3.08
Saugeen, "	3.29	3.20	3.12	3.06	2.94	2.97	3.08	3.00	3.12	3.10	2.94	3.04	3.01	3.06	3.08
Stayner, ,,	3.31	3.17		3.08	2.90	1.				3.15	2.99	.	3.01	2.86	
Little Current ,,	3.51			3.00			2:97			3.11			3.04		1.
Fort Garry, Man	. 2.89	2.75	2.79	2.77	2.73	2.76	2 76	2.65	2.65	2.65	2.52	2.60	2.79	2.68	2.73

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich 0 43 p.m. ,,

4 25 p.m. 9 43 p.m.

															
Stations.	4th S	epter	ber.	5th S	epten	ber.	6th S	Septen	ber.	7th S	Septen	nber.	8th S	Septem	ber.
Glace Bay, N.S.	55	.		59	ů		62	°.		62	°		58	· l	
Sydney, ,,	55	58	44	63	66	52	62	64	62	64	62	63	58	53	50
Guysborough, ,,	55			55		,		,					.	.	•
Halifax, "	55	60	48	60	59	53	61	61	63	63	65	60	59	61	55
Charl'town, PEI.	53	62	56	59	68	57	56	65	64	63	62	58	56	54	51
Chatham, N.B.	49	66	50	55	72	54	54	68	62	62	65	59	59	55	51
Bathurst, ,,	53			59		٠	,			61	•		55	. [
Father Point, Q.	52	56	51	55	56	55	59	62	69	58	62	58	59	62	59
Quebec, ,,	50	65	55	59	71	62	64	69	64	62	64	60	63	61	60
Montreal, "	55	68	58	58	69	64	65	71	64	59	68	62	63	73	60
Cornwall, ,,	49			61	٠.		67			61			61	. 1	
Ottawa, "	44	69	50	52	73	70	65	71	62	63	76	60	60	78	59
Brockville, "	4 4	66	51	58	75	70	69	69	62	64	71	61	69	77	59
Kingston, ,,	51	63	53	62	76	66	65	70	61	60	70	59	62	75	63
Peterborough,,,	43			57			,			64			67	,	
Toronto, ,,	55	62	56	64	70	67	62	78	64	62	69	63	65	74	60
Port Dover, "	53	72	58	68	71	68	62	75	62	62	75	68	69	81	65
Port Stanley, "	54	68	64	69	69	62	57	73	59	61	73	69	69	87	9
Windsor, "	57			70			63			67			70		
Granton, "	50			62			58			62	ļ .		70		
Stratford, "	49		,	61				,		58			68		
Goderich, "	50			65			64		.	66		ļ.	71		
Kincardine, "	45	62	59	63	72	60	63	73	56	62	81	70	66	72	63
Saugeen, ,,	45	62	57	61	74	60	62	67	50	60	78	53	62	70	59
Stayner, "	45	70		59	75	•				55	77		63	76	
Little Current ,,	62			58			63		 	65			69		
Fort Garry, Man.	47	77	59	46	71	57	51	79	64	57	87	70	53	84	75
-	1	1	<u> </u>			<u> </u>	1	·	1	1	l .	ļ _	1	1	1

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich "

0 43 p.m.

4 25 p.m. 9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

Stations.	9th S	Septem	ibe r .	10th	Septen	nber.	11th	Septer	mber.	12th	Septer	nber.	13th	Septer	nber
lace Pay, N.S.	2.99	.		2.56			2.57			2.79	. ;	•	3.14		
Sydney, ,,	3.01	2.96	2.89	2.64	2.61	2.65	2.55	2.68	2.70	2.83	3.02	3.10	3.17	3·19	3.2
łuysborough, "	3.02			2.69			2.57			2.87			3.16		•
Halifax, "	3.06	3.01	2.96	2.76	2.64	2.70	2.68	2.80	2.87	2.97	3.09	3.19	3.26	3.53	3.2
Charl'town, PEI.	3.08	2.99	2.87	2.69	2.67	2.71	2.65	2.81	2.85	3.00	3.15	3.22	3.27	3.27	3.2
Chatham, N.B.	3.13	2.93	2.76	2.73	2*67	2.72	2.79	2.85	2.93	3.16	3.09	3.27	3.40	3.29	3.3
Bathurst, ,,	3.09			2.70			2.79			3.16					
Father Point, Q	3.08	2 86	2.72	2.80	2.82	2.80	2.93	3.02	3.07	3.21	3.50	3.28	3.29	3.21	3.1
Quebec, ,,	3.10	2.94	2.91	2.85	2.84	2.87	2.91	2.95	3.06	3.23	3.18	3.19	3.25	3.18	3.1
Montreal, ,,	3.15	3.03	3.02	2.97	2.88	2.96	3.01	2.98	3.08	.	3.18	3.22	3.24	3.15	3.1
Cornwall, Ont.	3.10			2.98	 •		2.98			3.11			3.19		
Ottawa, "	3.15	3.00	3.03	2.98	2.87	2.97	2.97	2.98	3.04	3.14	3.15	3.21	3.21	3.11	3.1
Brockville, ,,	3.21	3.12	3.13	3.10	3.00	3.03	3 06	3.03	3.04	3.17	3.20	3.22	3.26	3.17	3.2
Kingston, ,,	3.15	3.12	3.10	3.07	3.00	3.01	3.02	2.96	3.01		3.14	3.14	3.17	3.12	3.2
Peterborough, ,,	3.13			3.04			2.99			3.13					
Toronto, ,,	3.12	3.05	3.07	3.07	2.94	2.98	2.99	2.91	2.96	3.04	3.03	3.07	3.11	3.05	3.1
Port Dover, ,,	3.14	3.08	3.10	3.13	2.96	3.00	3.01	2.95	2.98	3.10	3.00	3.08	3.13	3.08	3.0
Port Stanley, ,,	3.11	3.07	3.10	3.13	3.01	3.05	3.05	3.04	3.00	3.07	3.02	3.07	3.11	3.07	3.1
Windsor, ,,	3:13			3.16			3.07		,	3.11			3.13		•
Granton, ,,	3.13			3.12			3.05		.	3 07			3.12		.
Stratford, ,,	3.14		.	3.14		.	3.05			3.08	.		.		
Goderich, "	3.12			3.10	١.		3.02			3.03] .	3.09		.
Kincardine, "	3.11	3.06	3 07	3.09	3.08	3.11	3.01	2.96	2.99	3.03	2.99	3.05	3.08	3.10	
Saugeen, "	3.08	3.08	3.14	3.10	3 05	3.03	3.00	2.95	2.96	3.02	3.02	3.05	3.08	3.07	3.1
Stayner, ,,	3.12	3.03		3.03	2.99		3.00	2.93		3.04	3.00		.		
Little Current ,,	3.06		¦ .	3.05			2.97			3.01	.		3.07		-
Fort Garry, Man	1	2 70	2.61	2.56	2.77	2.86	2 80	2.60	2.82	3.05	3.03	3.05	3.01	2.87	2.1

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m.

10 50 p.m.

0 43 p.m. 9 43 p.m. 4 08 a.m. (of next day.)

Stations.	9th S	epten	iber.	10th 8	Septer	nber.	11th	Septer	nber.	12th '	Septer	nber.	13th	Septen	nber.
Glace Bay, N.S.	55	0	· ·	54	0	•	54	°		50	0	•	o 54	°	•
Sydney, "	53	58	47	53	59	49	55	48	49	50	49	50	53	55	34
Guysborough, ,,	.			.							. 1		52	.	
Halifax, ,,	54	59	53	56	70	53	57	56	48	55	52	49	54	60	45
Charl'town, PEI.	54	64	58	58	62	54	53	53	52	50	50	45	53	56	49
Chatham, N.S.	53	67	61	67	67	51	51	58	49	52	56	42	45	67	48
Bathurst, ,,	46			67			54			53	. '		.		
Father Point, Q.	52	54	52	50	55	49	.50	51	47	49	54	51	50	55	52
Quebec, ,,	61	72	64	64	72	55	53	61	52	52	58	52	53	73	60
Montreal, ,,	55	74	66	65	32	66	60	66	57	.	64	55	53	73	65
Cornwall, Ont.	62			66			64	,		57			56		
Ottawa, "	58	81	66	66	85	70	63	74	63	56	68	55	52	78	63
Brockville, ,,	50	78	64	71	81	70	63	74	67	56	68	61	57	78	68
Kingston, "	61	72	65	64	78	70	66	77	67		72	61	61	76	70
Peterborough, ,,	60			72		.	72			62	 •				
Toronto, "	65	79	65	69	86	69	72	82	70	67	71	64	62	73	69
Port Dover, "	62	78	63	65	76	71	66	78	68	61	78	62	58	83	68
Port Stanley, "	61	77	61	60	76	65	60	77	62	54	80	61	58	79	64
Windsor, "	70			63		١.	60			65			65		
Granton, ,,	62			65			62	١.		60	١.	.	61		
Stratford, "	60			65	<u> </u>		64	!	.	59					
Goderich, "	68			71			67		١.	64			72		
Kincardine, "	66	78	65	69	73	64	67	80	65	66	80	68	75	66	65
Saugeen, ,,	66	77	63	69	75	62	63	77	59	62	78	67	67	67	64
Stayner, ,,	57	82	!	79	80		67	78		60	80		1.		
Little Current ,,	72			77			70			65			69	١ .	
Fort Garry, Man.	67	82	73	61	71	55	46	61	48	41	66	53	50	69	51

1874

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

Greenwich ,, 0 43 p.m.

9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

Stations.	14th	Septer	aber.	15th	Septer	aber.	16th	Septer	nber.	17th	Septer	nber.	18th	Septer	mber
llace Bay, N.S.	3.27			3.53	,		3· 2 1		<u> </u>	3.30			3.28		
lydney, "	3.30	3.22	3·24	3.25	3.19	3· 21	3.24	3.21	3.25	3.31	3.42	3.20	3.61	3.61	3.61
duysborough, "	3 · 27			3.21			3.20			3.27			3.52		
Halifax, ,,	3.31	3.24	3.26	3.24	3.17	3.18	3.19	3.17	3.18	3.27	3.35	3.42	3.46		3.4
Charl'town, PEI	3 · 28	3.23	3.24	3.23	3.16	3.16	3.18	3.18	3.25	3.39	3.47	3.23	3.28	3.21	3.56
Chatham, N.B.	3.31	3.16	3.18	3.19	3.02	3.06	3.13	3.19	3.29	3.52	3.57	3.61	3.67	3.55	3.52
Bathurst, ,,	3.19			3.12			3.11			3.21			3.64		
Father Point, Q,	3.17	3.20	3·10	3.03	2.85	2.88	3.16	3.28	3.36	3.52	3.53	3.23	3.59	3.23	3.37
Quebec, ,,	3.17	3.10	3.07	3.04	2.87	2.93	3.13	3.23	3.28	3.42	3.38	3.40	3.42		3.34
Montreal, ,,	3·19	3.08	3.07	3.05	2.93	3.01	3.19	3.24	3.29	3.33	3.28	3.30	3.28	3.26	3.2
Cornwall, Ont.	3.12			3.00			3.16			3.27			3.17		١.
Ottawa, "	3.16	3.03	3.01	3.00	2.87	3.09	3.21	3.23	3.29	3.29	3.25	3.23	3.21		3.2
Brockville, ,,	3.26	3.12	3.13	3.09	3.05	3.11	3.26	3.30	3.30	3 32	3.27	3.27	3.23		3.2
Kingston, , ,,	3.22	3.10	3.09	3.07	3.00	3.10	3.18	3 20	3.22	3.22	3.20	3.21	3.17	3.17	3.2
Peterborough, ,,	3.12	١.		2.97			3.21			3.22] .	.	3.09	.	•
Foronto, ,,	3.13	2.98	2:96	2.95	2.99	3.10	3.22	3.18	3.19	3.15	3.06	3 06	3.07	3.08	3.0
Port Dovér, "	3.14	2.99	2.95	2.98	3.01	3.11	3.15	3.16	3.14	3.11	3.02	3.01	3.06	3.06	3.0
Port Stanley, "	3.11	3.00	2.96	2.97	3.03	3.12	3.17	3.14	3.14	3.09	3.00	3.00	3.03	3.05	3.0
Windsor, ,,	3.11			2.96		.	3.24].		3.10			3.07		
Granton, ,,	3.10	ļ.		2.94			3.21		į .	3.12] .	3.06		
Stratford, ,,	3.12		,	2.95			3.22			3.14			3.08		
Goderich, "	3.09			2.90			3.24			3.11			3.05		
Kincardine, ,,	3.08	2.95	2.86	2.93	3.05	3.16	3.24	3.18	3.21	3.13	3.05	3.00	3.05	3.03	3.0
Saugeen, ,,	3.08	2.91	2.92	2.92	3.06	3.16	3.24	3.23	3.50	3.13	3.01	2.98	3.05	3.06	3.0
Stayner, ,,	3.10	2.89		2.88	3.04	į .	3.26	3.20		3:13	3.06		3.06	3.04	j .
Little Current ,,	3.12			2.92	.	.	3.31			3.22] .	3.00	.	.
Fort Garry, Mar	2.99	3.08	3.15	3.16	3.02	3.03	3 00	2.95	2.90	2.60	2.43	2.58	2.84	3.01	3.0

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich "

0 43 p.m.

4 25 p.m. 10 50 p.m. 9 43 p.m. 4 08 a.m. (of next day.)

Stations.	14th S	Septem	ber.	15th S	Septen	aber.	16 th 8	Septen	iber.	17th S	Septen	nber.	18th 8	Septen	ber.
Glace Bay, N.S.	55	°	°	62		•	59	°	•	° 58	. 1	•	°	<u>. </u>	•
Sydney, ,	57	63	57	61	61	55	59	61	54	58	51	50	50	48	48
Guysborough 1,,	56	.		59	.		60	.		61	.		54	.	
Halifax, ,,	55	62	55	60	61	55	63	61	58	61	58	52	56	52	51
Charl'town, PEI.	56	65	57	59	66	58	60	65	57	56	52	52	54	54	51
Chatham, N.B.	53	66	58	57	70	59	62	64	57	53	52	47	53	54	52
Bathurst, ,,	56	.		58			61			55			53		
Father Point, Q.	52	55	51	53	50	59	47	55	50	44	48	44	47	46	41
Quebec, ,,	62	64	58	60	79	69	58	60	54	52	53	50	50	50	50
Montreal, ,,	62	76	68	65	74	66	57	63	53	51	58	60	56	57	55
Cornwall, Ont.	63	.		71			55			56		ļ 1 .	59		
Ottawa,	60	86	72	71	81	59	52	65	55	55	57	57	56	60	57
Brockville, "	65	82	72	67	79	63	54	60	58	55	58	57	59	66	62
Kingston, "	67	81	73	67	75	60	57	64	59	56	59	59	60	66	63
Peterborough, "	63			71		, .	55			54			60		
Toronto, ,,	69	81	72	72	63	60	55	64	58	58	65	64	63	71	63
Port Dover, "	72	85	75	72	64	59	56	62	60	61	66	66	63	76	65
Port Stanley, "	71	80	 75	73	63	57	50	62	60	60	67	68	67	73	66
Windsor, ,,	71	١.		74			55			59		١.	65		"
Granton, ,,	71	١.	 .	69		.	47	١.		55		1 .	62		١.
Stratford, ,,	68			69			49	١.		55			61		١.
Goderich, ,,	68		1.	72			52	١.		58			65		١.
Kincardine,	65	86	79	62	59	57	56	64	52	55	63	63	64	72	67
Saugeen,	62	80	76	59	59	54	55	60	44	52	62	63	62	71	65
Stayner,	63	84		73	60		55	63	.	55	59		61	'1 73	
Little Current "	60			57	.		55	.		1 52			68	13	•
Fort Garry, Man		50	37	33	62	47	48	56	48	51	53	48	50		45

Table I.—Barometer at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m

10 50 p.m.

Greenwich " 0 43 p.m.

4 08 a.m. (of next day.)

Stations.	19th	Septe	ember.	20th	Septe	mber.	21st	Septer	nber.	22nd	Septe	mber.	23rd	Septe	mber.
Glace Bay, N.S.	3.23			3.36			3.09			3.00			3.11		.
Sydne y , "	3.57	3.21	3.45	3.39	3.28	3.19	3.09	2.94	2.89	3.04	3.12	3.22	3.24	3.21	3.23
Guysborough, ,,	3.47			3.31			3.03	į .		3.04			3.22		
Halifax, ,,	3.42	3.36	3.28	3.25	3.11	3.08	2.99	2.86	2.94	3.07	3.15	3.19	3.23	3.17	3.22
Charl'town, PEI.	3.21	3.43	3.38	3.31	3.16	3.08	3.01	2.89	2.98	3·11	3.20	3.23	3.26	3 · 22	3.24
Chatham, N.B.	3.20	3.38	3.33	3.31	3.14	3.06	3.00	2.90	3.00	3.17	3.15	3.19	3.27	3.16	3.20
Bathurst, ,,	3.49						2.97] .		3.18			3.22		
Father Point, Q.	3.39	3.27	3.50	3.09	2.91	2.87	2.94	2.97	3.08	3.14	3.09	3.13	3.11	3.12	3.18
Quebec, "	3.29	3.16	3.12	3.02	2.88	2.93	3.04	3.06	3.11	3.19	3.11	3.12	3.13	3,14	3.18
Montreal, ,,	3.26	3.09	3.04	2.94	2.97	3.03	3.14	3.13	3.16	3.21	3.14	3.14	3 16	3.17	3.19
Cornwall, Ont.	3.21			2.86			3.14			3.19			3.16		
Ottawa, ,,	3.22	2.99	2.97	2.85	2.94	3.07	3.17	3.15	3.17	3.50	3.06	3.10	3.20	3.16	3.21
Brockville, ,,	3.29	3.07	3.05	2.98	3.05	3.12	3.26	3.22	3.24	3.24	3.20	3.22	3.26	3.25	3.27
Kingston, ,,	3.17	3.02	3.05	2.96	3.03	3.18	3.22	3.19	3.19	3.24	3.16	3.16	3.23	3 21	3 24
Peterborough, ,,	3.14						3.21	١.		3.18			3.22		
Toronto, "	3.03	2.81	2.78	2.96	3.06	3.14	3.24	3.16	3.19	3.17	3.11	3.13	3.19	3.13	3.15
Port Dover, "	3.00	2.78	2.86	3.02	3.09	3.16	3.27	3.18	3.21	3.17	3·14	3.16	3.50	3.13	3.14
Port Stanley, ,,	2.95	2.76	2.90	3.01	3.09	3.17	3.25	3.17	3.20	3.17	3.13	3.15	3.18	3.12	3.16
Windsor, ,,	2.88			3.10			3.32			3.21			3.21		
Granton, ,,	2.97			2.99			3.27			3.16			3.20		
Stratford, ,,	2.98						3.28			3.18			3.22		
Goderich, "	2.90			3.01			3.22		.	3.14			3.18		·
Kincardine, "	2.90	2.97	3.01	3.00	3.07	3.16	3.23	3.12	3.14	3.11	3.06	3 07	3.16	3.03	3.11
Saugeen, ,,	2·87	2.73	2.77	2.94	3.07	3.16	3.22	3.13	3.12	3.10	3.10	3 14	3.14	3.06	3.08
Stayner, ,,	2.99	2.73					3.21	3.15		3.08	3.03		3.14	3.06	
Little Current "	2.85		.	2.83			3.22			3.01			3.14		•
Fort Garry, Man.	3.09	3.04	3.06	3.16	3.09	3.07	2.85	2.77	2.86	3.02	2.88	2 78	2.84	2.90	2.93

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

Stations.	19th 8	Septem	ber.	20th S	sep t em	ber.	21st S	ep t em	ber.	22nd 8	Septer	nber.	23rd S	septen	ıber.
Glace Bay, N.S.	52	0	•	58	0		61		•	54	•		54	.	•
Sydney, ,,	52	54	54	57	62	59	62	65	61	57	55	38	51	52	35
Guysborough, ,,	53			57	.		63	.		56			47		
Halifax, ,,	54	56	57	59	61	60	62	66	59	58	57	48	50	55	44
Charl'town, PEI.	53	58	56	61	67	63	64	59	56	53	54	47	52	58	49
Chatham, N.B.	52	58	57	59	70	66	65	62	49	47	61	41	43	62	53
Bathurst, ,,	54			.			59	.		50			46	.	
Father Point, Q.	48	50	49	55	57	58	54	55	51	45	51	53	50	54	51
Quebec, ,,	55	62	60	62	62	56	52	55	45	44	61	48	51	60	51
Montreal, ,,	58	69	61	64	58	53	51	56	50	50	58	55	56	65	60
Cornwall, Ont.	60			65	- 1		52			59			59		
Ottawa, "	60	72	65	65	65	53	48	57	43	37	63	55	55	67	61
Brockville, "	61	73	66	65	63	52	53	59	46	50	63	56	62	65	53
Kingston, ,,	63	71	67	57	63	50	50	60	41	52	63	60	56	66	57
Peterborough, "	64						52			50			54		
Toronto, "	66	76	67	57	60	49	48	63	46	52	61	53	55	64	55
Port Dover, ,,	69	75	61	55	58	49	44	63	46	62	63	51	48	74	58
Port Stanley, "	69	75	59	54	62	49	47	65	45	50	63	48	46	70	52
Windsor, "	72		! ! •	54	.		46			54		<u>.</u>	52		
Granton, ,,	65			50			45			51			47		
Stratford, ,,	65			.			43			51			46		١.
Goderich, "	67			54		١.	56			57			53		
Kincardine, "	67	78	61	54	58	53	48	62	52	55	65	53	54	71	63
Saugeen, "	67	65	58	52	58	50	45	57	46	53	59	53	52	68	61
Stayner, ,,	65	76		.			47	48		55	61		49	68	•
Little Current "	67			49		١.	45		.	54			56		
Fort Garry, Man	. 38	51	45	39	54	41	44	65	46	39	67	58	48	68	51

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

10 50 p.m.

4 25 p.m. 9 43 p.m. 0 43 p.m. 4 08 a.m. (of next day.) Greenwich "

The Height of the	e Barometer = 27	inches + the numbers	in the Table.
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Stations.	24th	Septe	mber.	25th	Septer	mber.	26th	Septe	mber.	27th	Septe	mber.	28th	Septer	nber.
Glace Bay, N.S.	3.22			3.23			3·17	.		3.24] .	3.16		
Sydney, ,,	3.27	3.25	3.27	3.27	3.50	3.22	3.20	3.17	3.20	3.25	2.24	3.22	3·17	3.06	2·97
Guysborough, ,,	3.53			3.24			3.17		. '	3.50			3.07		
Halifax, ,,	3.56	3.51	3.25	3.25	3.16	3.16	3.16	3.12	3.14	3.17	3.12	3.07	2.98	2.86	2.78
Charl'town, PEI	3·29	3.26	3.27	3.56	3.19	3.19	3.50	3.16	3.18	3.23	3.19	3.16	3.10	2.97	2.86
Chatham, N.B.	3.32	3.55	3.23	3.27	3.10	3.13	3.21	3.12	3.16	3.26	3·19	3.19	3.17	2.91	2.81
Bathurst, ,,	3.28			3.23			3.17						3.10		١.
Father Point, Q.	3.26	3.17	3.14	3.11	3.04	3.13	3.13	3.07	3.12	3·11	3.03	3.02	3.04	2.84	2.73
Quebec, ,,	3.25	3.14	3.14	3.17	2.99	3.03	3.11	2.99	3.03	3.03	2.92	2.95	2.92	2.76	2.71
Montreal, ,,	3.24	3.14	3.15	3.15	3.05	3.11	3.13	3.03	3.02	3.01	2.87	2.88	2.86	2.72	2.68
Cornwall, Ont.	3·19			3.16			3.14			2.96			2.81		
Ottawa, ,,	3.21	3.12	3.15	3.16	3.07	3.13	3.14	3.01	2.98	2.94	2.80	2.81	2.79	2.68	2.76
Brockville, "	3.27	3.20	3.22	3.27	3.19	3.21	3.22	3.09	3.07	3.00	2.88	2.88	2.90	2.81	2.81
Kingston, ,,	3.21	3.18	3.21	3.27	3.17	3.23	3.17	3.04	2.98	2.94	2.83	2.85	2.83	2.74	2.74
Peterborough, ,,	3.20			3.21			3.14					.	2.81		.
Toronto, "	3.18	3.12	3.17	3.22	3.11	3.12	3.09	2.93	2.85	2.78	2.76	2.79	2.78	2.75	2.79
Port Dover, ,,	3.21	3.15	3.19	3.24	3.12	3.13	3.07	3.01	2.86	2.77	2.81	2.81	2.80	2.76	2.81
Port Stanley, ,,	3.17	3.13	3.18	3.22	3.13	3.12	3.06	2.90	2.85	2.80	2.83	2.83	2.81	2.80	2.85
Windsor, "	3.50			3.23			3.02			2.87			2.86	.	
Granton, ,,	3.20			3.24			3.06			2.79] .	2.82		
Stratford, "	3.22	ļ .		3.25			3.10				•		2.84		
Goderich, ,.	3.16			3.22			3.03			2.79		.	2.82		
Kincardine, "	3.15	3.12	3.15	3.20	3.10	3.10	3.01	2.85	2.75	2.77	2.78	2.81	2.81	2.83	2.84
Saugeen, ,,	3.15	3.12	3.12	3.17	3.09	3.07	3.02	2.87	2.76	2.74	2.84	2.79	2.85	2.79	2.84
Stayner, ,,	3.13	3.08	.	3.15	3.09		3.02	2.83	· ·			.	2.80	2.76	
Little Current ,,	3.08	ļ ,		3.13	.		2.98	.		2.74		.	2.80	(•	1.
Fort (farry, Man	2.89	2.66	2.71	2.69	2.56	2.74	2.77	2.80	2.92	3.04	2.90	2.92	2.99	2.96	3.07

1874.

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

	24th S	Septen	iber.	25th 8	Septen	aber.	26th 8	Septen	aber.	27th 8	Septer	nber.	28th S	epten	iber.
alace Bay, N.S.	o 54	.	•	55	,	•	52		•	56	8	· ·	9 55	8	Q
Bydney, ,.	55	53	36	49	54	37	53	56	37	52	55	33	54	57	58
Suysborough, ,,	49	.		44	.		46	.]		45			58		
Halifax, ,	52	58	50	56	60	48	50	57	49	55	58	55	58	63	61
Charl'town, PEI.	53	63	52	57	62	54	53	61	53	54	61	49	58	63	62
Chatham, N.B.	51	64	48	46	67	55	54	62	57	57	65	45	52	59	60
Bathurst, ,,	58		•	48			54	,					49		
Father Point, Q	48	47	48	47	47	49	50	49	50	44	46	45	46	46	45
Quebec, ,,	50	65	55	55	69	60	55	73	55	50	60	60	57	61	54
Montreal, ,,	55	66	60	61	74	66	65	74	64	63	73	61	61	69	63
Cornwall, Ont.	54			60	.		64			66			63		
Ottawa, "	50	70	58	58	78	63	53	74	60	58	78	70	61	61	54
Brockville, ,,	56	69	57	64	71	62	64	74	60	68	76	70	59	63	62
Kingston, ,,	62	68	62	63	69	63	64	77	67	68	73	67	61	64	55
Peterborough, ,,	56			55	,		54			.			60		
Toronto, ,.	56	71	62	59	75	63	61	71	69	67	64	61	60	61	57
Port Dover, ,,	52	74	57	52	77	57	68	78	69	66	63	58	55	63	56
Port Stanley, ,,	50	73	55	52	73	63	66	73	68	63	60	54	54	හ	50
Windsor, ,,	54			62			69	•		59			54		
Granton, ,,	50			52			63			62	•		52		
Stratford, "	49			52			60						51	•	
Goderich, ,,	61	.		57			64	ļ.	١:	62	٠,		54		
Kincardine, "	60	77	64	61	78	67	67	68	68	67	68	55	55	58	57
Saugeen, ,,	58	72	59	60	69	60	62	67	68	62	68	52	52	63	56
Stayner, "	59	73		57	69		61	72	.	.			52	56	
Little Current ,,	64			66			62		.	61			59		
Fort Garry, Man	45	80	64	54	80	55	43	53	45	37	67	46	36	64	4.3

TABLE I.—Barometer at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

Greenwich

0 43 p.m.

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	29th	Septe:	mber.	30th	Septe:	mber.	1 st	Octol	ber.	2n/	l Octo	ber.	3rd	Octo	ber.
Glace Bay, N.S.	2.80			2.61	<u> </u>		2.70			3.01			2.82		
Sydney,	2.82	2.80	2.84	2.64	2.50	2.61	2.73	2.57	2.72	3.01	3.07	2.99	2.83	2.89	2·\$ 3
Guysborongh ,,	2.74			2.58		١.	2.66			3.02			2.82		
Halifax, ,,	2.70	2.81	2.72	2.47	2.43	2.57	2.64	2.61	2.82	2.99	2.96	2.77	2.85	2.88	2.97
Charl'town, PEI	2.71	2.74	2.75	2.45	2.34	2.49	2.62	2.56	2.74	2.96	2.96	2.77	2.78	2.87	2.96
Chatham, N.B.	2.67	2 65	2 66	2.40	2.19	2.29	2.55	2.52	2.67	2.94	2.80	2.63	2.75	2.82	2.95
Bathurst, ,.	2.67			2.32			2.20			2.86		.	2.82		-
Father Point, Q.	2.60	2.62	2.58	2.24	1.94	2 23	2.31	2.46	2.57	2.71	2.62	2.26	2.74	2.87	2.95
Quebec, ,,	2.67	2.61	2.57	2.09	2.11	2.33	2.21	2.72	2.77	2.66	2.59	2.62	2.86	3.03	3.12
Montreal, ,,	2.72	2 66	2.23	2.37	2.48	2 55	2.68	2.70	2.72	2.54	2.52	2.73	3.91	3.09	
Cognwall, Ont	2.73			2.44			2.69		•	2.48			2.99		
Ottawa, ,,	2.76	2.66	2.65	2.48	2.52	2.65	2.75	2.72	2.72	2.45	2.53	2.75	3.06	3.14	3.25
Brockville, ,,	2.85	2.74	2.73	2.55	2.71	2.77	2.87	2.85	2.83	2.55	2.70	2.92	3:14	3.19	3.29
Kingston,	2 79	2.73	2 64	2.56	2.67	2.75	2.85	2.79	2.72	2.48	2.70	2.97	3.14	3.17	3.24
Peterborough,,,	2.82			2.68			2.86			2.20			3.10	.	
Toronto, "	2.80	2.70	2.68	2.68	2.78	2.87	2.88	2.69	2.52	2.56	2.84	2.97	3.08	3.18	3.30
Port Dover, "	2 82	2.72	2.75	2.74	2.83	2.94	2.92	2.71	2.52	2.64	2.85	3.00	3.08	3.16	3.29
Port Stanley, ,,	2.86	2 80	2.78	2.80	2.89	2.94	2.94	2.72	2.53	2.69	2.88	3 01	3.08	3.17	3.29
Windsor, ,,	2.82	.		2.95	.		3.00			2.82			3.17		
Granton, "	2.87		١.	2.81		ĺ ·	2 93	·		2.68	.		3.11		
Stratford, ,,	2.88	.		2.81			3.00			2.70			3.13		
Goderich, ,	2.85		-	2.83			2.91			2.69			3.12		
Kincardine, "	2.84	2.79	2.73	2.83	2.89	2.90	2.87	2.82	2.45	2.67	2.91	2.98	3.13	3.23	3.30
Saugeen, "	2.89	2.74	2.71	2.81	2.84	2.86	2.82	2.57	2.42	2.61	2.87	2.96	3.11	3.22	3.27
Stayner, ,,	2.37	3.41		2.72	2.78		2.82	2.58	.	2.23	2.85		3.01	3.16	
Parry Sound, "	2 81	2.70	2.74	2.77	2.79	2.86	2.83	2.64	2.48	2.52	2.84	2.97	3.14	3.19	3.28
Little Current,,	2.78			2.88	.		2.83			2.67			3.12		
Fort Garry, Man	3.30	8.12	3.13	3.07	2.75	2.85	2.98	2.91	3.02	3.12	3.14	3.19	3.27	3.16	3.17

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations.	29th	Septer	nber.	30th	Sep t er	nber.	Чst	Octol	er.	2nd	Octo	ber,	3rd	l Octo	ber.
Glace Bay, N.S.	61	0		65	•	°	6 59	0	0	° 55	٥		60	•	0
Sydney, "	62	61	59	65	65	56	61	54	48	54	54	53	61	58	50
Guysberough "	65			64			58			46			59	٠,	• 4,4
Halifax, "	60	61	59	62	58	56	55	55	45	57	57	59	57	55	49
Charl'town, PEI.	64	65	62	64	63	57	57	55	48	52	58	57	55	58	51
Chatham, N.B.	65	69	63	63	61	55	46	51	42	42	56	53	54	53	46
Bathurst, ,,	65			64			49			45			54		
Father Point, Q.	46	49	47	46	51	44	44	45	42	45	48	43	48	: 43	41
Quebec, ,,	56	60	55	54	48	40	43	47	44	46	49	47	43	44	40
Montreal, ,,	56	58	56	49	45	44	44	49	47	50	54	48	50	54	
Cornwall, Ont.	56			51			46			51			40		
Ottawa, ,,	55	62	53	50	47	46	45	46	46	46	50	44	39	45	39
Brockville, "	53	58	53	50	44	41	48	49	46	53	45	44	43	48	38
Kingston, ,,	54	60	53	48	47	41	43	50	50	56	47	44	88	4 9	39
Peterborough, "	50			45			42			49			88		
Toronto, ,,	51	62	49	45	48	42	45	55	56	51	51	45	43	50	42
Port Dover, "	47	62	53	47	49	43	45	59	58	49	56	43	44	54	40
Port Stanley, "	44	64	51	46	47	45	41	60	63	49	57	42	44	52	40
Windsor, ,	48			45			44			50			49		
Granton, ,,	43			43			43			45			42		
Stratford, ,,	43			44		,	38	,		46			42		•
Goderich, "	50			46			47			50			42		.
Kincardine, "	49	56	51	46	48	50	49	55	55	48	50	48	46	48	47
Saugeen, ,,	46	57	49	44	45	48	47	50	52	47	51	45	42	41	423
Stayner, ,,	54	53		45	42		45	49		45	47		43	45	
Parry Sound, ,,	46	56	48	41	46	43	40	47	48	39	47	39	36	45	42
Little Current ,,	57			43			43			44			41		-
Fort Garry, Man.	31	61	44	37	70	48	36	61	44	30	51	38	29	57	44
5—9	1	<u></u>	<u> </u>	<u> </u>	<u></u>	1	31	!	l						

Table L.—Barometer at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich

θ 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

Stations.	4th	Octol	er.	5th	Octo	ber.	6 t h	Ooto	ber.	7th	Octo	ber.	8th	Octo	ber.
Glace Bay, N.S.	2.88			3.08			3.09			3·27			3.26		.
Sydney, ,,	3.01	3,02	3.04	3·10	3.12	3.13	3.11	3·12	3.23	3.34	3· 3 8	3.34	3.31	3·18	3.13
Guysborough, ,,	3.03			3·10		ļ .	3.08			3· 3 3			3.29		
Halifax, ,,	3.09	3.09	3·10	3.14	3.10	3.11	3.14	3.18	3.27	3.39	3.36	3.38	3.34	3.18	3.05
Charl'town, PEI.	3.06	3.08	3·10	3.16	3.18	3·17	3.18	3.19	3.24	3.36	3.36	3.35	3.32	3.18	3.08
Chatham, N.B.	3·10	3.17	3.21	3.30	3.17	3.17	3.53	3.16	3.25	3.39	3.30	3.31	3.35	3.10	3.03
Bathurst, ,,				3.23			3.22	.	١.	3.34			3.26		
Father Point, Q.					.								.		.
Quebec, ,,	3.22	3.53	3.27	3.80	3.21	3.21	3.26	3.21	3.27	3.36	3· 3 5	3· 33	3.35	3.11	3.04
Montreal, ,,	3· 2 8	3.39	3.31	3.35	3· 21	3.19	3.17	3.16	3.24	3.31	3.30	3.27		3.03	2.91
Cornwall, Ont.	3.29			3.36	١.		3.12	ļ .		3.24			3.17		.
Ottawa, "	3.32	3.32	3.44	3.38	3.53	3.20	3.12	3.13	3.23	3.27	3.26	3.25	3.16	3.02	2.92
Brockville, "	3.39	3.41	3.43	3.46	3.29	3.26	3.20	3.21	3.26	3.32	3.32	3.32	3.24	3.12	3.02
Kingston, "	3.37	3.38	3.38	3.44	3.28	3.19	3.11	3.14	3.17	3.24	3.28	3.28	3.17	3.03	2.89
Peterborough, ,,				3.39	.	.	3.04			3.21			3.10] .
Toronto, ,,	3.37	3.37	3.39	3.39	3.19	3.08	2.98	2.99	3.07	3.17	3.17	3.14	3.08	2.95	2.85
Port Dover, "	3.37	3.37	3.39	3.40	3.19	3.06	2.94	2.94	3.01	3.11	3.13	3.13	3.08	2.92	2.88
Port Stanley, "	3.37	3.38	3.40	3.38	3.17	3.04	2.93	2.92	3.02	3.09	3.11	3.13	3.07	2.96	2.93
Windsor, "	3.46			3.41			2.97			3.12			3.11		
Granton, ,,	3.39			3.39			2.93			3.13	.		3.09		.
Stratford, ,,				3.42			2.95			3.15	.		3.12		
Goderich, ,,	3.41			3.37	.		2.93			3.18	.	-	3.11		
Kincardine, ,,	3.41	3.42	3.42	3.36	3.02	3.02	2.91	2.98	3.09	3.18	3.19	3.18	3.11		2.93
Saugeen, ,,	3 43	3.44	3.48	3.38	3.19	3.09	3.05	3.02	3.11	3.20	3.18	3.17	3.11	2.99	2.90
Stayner, ,,			.	3.35	3.07		2.94	3.05		3.17	3.06	.	3.08	2.92	.
Parry Sound, ,,	3.39	3.39	3.41	3.37	3.16	3.06	3.01	3.06	3.17	3.24	3.23	3.21	3.11	2.97	2.93
Little Current,,	3.43		.	3.30	.	.	2.98		.	3.26	.	.	3.13		
Fort Garry, Man	3.08	2.92	3.01	3.21	3.23	3.28	3.30	3.18	3.15	3.12	2.89	2.88	2.89	2.92	2.91

TABLE II .- Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. 4 25 p.m. Greenwich ,, 0 43 p.m. 9 43 p.m.

Stations.	4th	Octo	er.	5th	Octob	er.	6th	Octol	er.	7th	Octob	er.	8th	Octob	er.
Glace Bay, N.S	o 57	0	۰	9 52	•	0	51	•	•	9 54	•	9	57	9	0
Sydney, ,,	58	51	38	50	49	48	51	50	43	55	52	40	57	54	46
Guysborough, ,,	47			47			49			44			45		
Halifax, ,,	48	49	44	47	51	48	50	52	40	49	53	45	51	51	52
Charl'town, PEI.	47	50	46	50	50	45	48	49	45	50	56	51	52	58	52
Chatham, N.B.	41	50	46	46	49	37	40	57	43	43	60	45	46	63	47
Bathurst, ,,				47			42			52			55		
Father Point, Q.	•			•											
Quebec, ,,	43	49	45	41	51	44	46	54	46	48	60	50	50	62	55
Montreal, ,,	41	50	44	44	52	45	42	53	50	50	57	53		63	58
Cornwall, Ont.	39			42			43			49			54		
Ottawa, ,,	39	51	41	40	51	40	40	48	46	48	56	56	57	60	56
Brockville, ,,	47	50	42	44	50	38	45	48	46	48	57	52	54	57	56
Kingston, ,,	42	50	45	43	51	49	48	50	49	49	55	54	56	57	56
Peterborough, ,,				39			47			48			56		
Toronto, ,,	44	52	43	43	52	52	51	51	51	50	54	53	53	58	58
Port Dover, ,,	35	53	45	35	55	55	53	56	55	50	56	52	52	62	53
Port Stanley, ,,	41	54	38	39	55	54	85	59	49	52	57	52	53	55	51
Windsor, ,,	42			37			51			51	•		51		
Granton, ,,	39			35			49			49			50		
Stratferd, ,,				35			49			49			50		
Goderich, ,,	45			39			50			50			49		
Kincardine, ,,	47	51	40	41	51	49	50	52	49	49	55	52	50	55	54
Saugeen, "	43	50	38	36	49	43	48	50	47	48	52	49	48	55	4(
Stayner, ,,				41	50		47	48		47	51		52	54	
Parry Sound, ,,	41	49	41	43	49	47	43	49	48	45	51	50	49	53	50
Little Current ,,	43			46			51			47			47	,	
Fort Garry, Man.	48	68	48	46	60	40	31	62	48	42	70	ે છે	50	64	40

Table I.—Barometer at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich ,

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

Stations.	965	Octo	ber.	100	Öoto	ber.	116	Octo	ber.	12t	a Octo	ober.	13t	h Octo	ber.
Glace Bey, N.S.	2.92			2.83	.		2.68			2.78		1.	3 07	1.	
Sydney, "	2.93	2.68	2.69	2.85	2.90	2.82	2 68	2 68	2.71	2.80	2.85	2.93	3.09	3.11	3.04
Guysborough, ,,	2.83			2.88			2.67			2 81			3.07		
Halifax, -,,	2.82	2.78	2.80	2.92	2.84	2 66	2.71	2.71	2.76	2.83	2.86	2.97	3.06	3.04	3 01
Charl'town, PEI.	2.90	2.68	2.72	2.87	2.83	2.69	2.63	2 62	2.68	2 78	2.85	2.96	3 10	3.12	3.08
Chatham, N. B.	2.94	2.62	2.66	2.86	2.74	2.64	2.21	2.57	2 63	2.78	2.83	2 97	3.20	3.19	3 17
Bathurst, ,,	2.89			2.83) •		2.71			3·19		,
Father Point, Q.															
Quebec,	2 86	2.69	2.82	2.72	2 58	2.21	2.50	2.57	2.73	2.30	2.98	3.08	3.24	3.28	3.23
Montreal, ,,		2.73	2 79	2.70	2.47	2.44	2.54	2 67	2.78	2.95	3.07	3.14	3 22	3.24	3 · 27
Cornwall, Ont.	2.73			2.65			2.58			2.98			3.19		
Ottawa, ,	2.73	2.74	2.73	2.62	2.40	2.43	2.53	2 67	2.83	3.05	3.13	3 19	3.25	3.26	3·31
Brockville, ,,	2 83	2.84	2 · 89	2.75	2.55	2.56	2.71	2 84	2 89	3.12	3.22	3.26	3 35	3.36	3.39
Kingston, ,,	2.78	2 80	2.78	2.66	2.49	2 55	2.68	2.81	2.88	3.06	3.18	3.25	3.29	3 34	3 33
Peterborough, ,,	2.82			2.63						3.13			3.26		
Toronto, ,,	2.86	2.79	2.77	2.52	2.43	2.57	2.70	2 83	2.93	3.09	3.21	3.32	3.33	3 · 35	3 36
Port Dover, "	2 91	2 82	2.76	2.56	2.20	2.66	2.79	2.86	2.99	3.10	3.12	3.29	3 · 35	3.36	3·37
Port Stanley, ,,	2 92	2 85	2:76	2.56	2.50	2.67	2.80	2.88	3.01	3.09	3.19	3.32	3 37	3.36	3.37
Windsor, ,,	2.98			2.61			2.87			3.24			3 48	ļ .	.
Granton, ,,	2.92			2.53			2.77] .		3.13			3.39		
Stratford, ,,	2.91			2.53						3.13] .	3.40		
Goderich, "	2.90			2.48	<u>'</u> .		2.76			3.16		,	3.42		
Kincardine, "	2.87	2.74	2 68	2 45	2.44	2.60	2.80	2.90	3.02	3.15	3.29	3.35	3.40	3.38	3.36
Saugeen, "	2.83	2.74	2 65	2.46	2-42	2.55	2:78	2.86	2.97	3.16	3.28	3.37	3.39	3 · 37	3.38
Stayner, ,,	2.81	2.73		2.44	2.43					3.08	3.26		3.33	3 31	
Parry Sound, ,	2.85	2.73	2.68	2.45	2.35	2.45	2.61	2.81	2 97	3.15	3.29	3.35	3.39	3.26	3 38
Little Current "	2.81			2.40			2.63			3.23			3.24		
Fert Carry, Man.	2:72	2.68	2.79	2.95	3.06	3 23	3.43	3.49	3.35	3.59	3.10	3.25	3.05	2.90	2.99

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. 4 25 p.m. 10 50 p.m. Greenwich ,, 0 43 p.m. 9 43 p.m. 4 08 a.m. (of next day.)

CO. 42-4-4-1-3-2-1-3-2-1-3-2-1-3-2-1-3-2-1-3-2-1-3-2-1-3-2-1-3-2-1-3-2-1-3-2-1-3-2-1-3-2-1-3-2-1-3-2-1-3-2-1-3	1			ī						1	-				
Stations.	9th	. Octo	ber.	10t	h Ooto	be r.	11t	h Ooto	ber.	12t	h Octo	ber.	13t	h Octo	ber.
Glace Bay, N.S.	53	l °	<u> </u>	·	°	:	62		1 *	55	•	•	ŏ 54	,	
Sýdney, "	51	54	56	59	57	54	57	57	53	57	53	47	53	50	48
Guysborough, ,,	52			55			60			50			45		
Halifax, j	54	57	53	56	57	56	59	56	51	54	55	44	44	49	46
Charl'town, PEI.	56	57	54	55	60	55	59	60	54	53	57	47	47	49	48
Chatham, N.B.	44	54	49	51	61	55	56	59	46	46	53	38	43	44	41
Bathurst, ,,	47			53				 •		49			44		•:
Father Point, Q.			. •			١.				,	,	,		.	
Quebeo, ,,	50	53	52	52	55	53	51	52	47	38	44	38	35	44	40
Montreal, ,,		- 57	55	52	58	53	53	51	48	39	41	36	36	401	39
Cornwall; Ont.	55			55			53			40		,	37		
Ottawa, "	54	59	52	51	57	51	50	53	47	36	41	36	34	40	37
Brockville, ,,	52	57	52	52	54	51	54	49	46	37	38	36	.32	36	35
Kingston, "	56	58	57	56	54	52	51	52	47	39	40	35	34	38	38
Peterborough, ,,	53			52						38			34	. `	
Toronto, ,,	51	60	51	56	54	49	47	51	44	42	41	36	35	38	37
Port Dover, ,,	47	60	58	55	54	47	44	53	41	40	43	37	35	40	36
Port Stanley, ,,	48	59	58	55	56	47	43	51	43	40	45	36	35	42	30
Windsor, "	48			52			46			38			35		
Granton, ,,	47			50			45			38			34		
Stratford,	49			51				•		39			34		
Goderich, ,,	52	.	.	50	.		48			39			35		
Kincardine, ,,	54	61	56	53	52	50	47	45	43	39	38	38	37	39	34
Saugeen, ,,	49	58	53	5)	51	48	45	43	40	36	36	36	35	35	30
Stayner,	51	55	.	52	50		, !			36	3 6		35	3 3	
Parry Sound, ,,	43	56	54	53	50	59	48	4 6	39	3 3	34	32	32	38	√29
Little Current ,,	52	.	.]	50	.	.	44			33			30		
Fort Garcy, Man.	46	58	45	35	,42	35	28	35	21	16	45	37	38	56	41

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

Stations.	14	th Oct	ober.	15	th Oct	ober.	16	th Oct	ober.	171	h Oct	ober.	181	th Oct	tober.
Glace Bay, N.	3. 2.83	1.	1.	2.80	1.	1.	2:80	<u> </u>	<u> </u>	2.93	1.	Ι.	2.78	1.	1.
Sydney, ,	2.85	2.78	2.76	2.84	2.82	2.84	2.84	2.85	2.89	2.96	2.89	2.87	2.82	2.60	2.29
Guysborough, ,	2.88	1.	1.	2.91		.	2:87	.	1.	2.93	! .	.	2.75	.	1.
Halifax, ,	3.00	2.94	2.96	3.03	2.99	2.98	2.95	2.88	2.94	2.96	2.86	2.83	2.72	2.44	2.19
Charl'town, PH	13.06	2.96	2.92	2.94	2.88	2.89	2.89	2.87	2 91	2.92	2.81	2.77	2.71	2.52	2.24
Chatham, N.1	3. 3.17	2.99	2.96	2.99	2.86	2.88	2.91	2.83	2.90	2.91	2.68	2.65	2.60	2.52	2.34
Bathurst, ,	8-15		1.	2.95	.		2.86	1.	.	2.81		.].
Father Point, C									.						.
Quebec,	8.08	3 05	3.08	3.25	8.04	3.08	3.11	2.94	2.95	2.87	2.57	2.56	2.63	2.66	2.65
Montreal, ,,	3.28	3.24	3·28	3.29	3.12	3.11	3.14	2.96	2.93	2.82	2.57	2.55	2.67	2.73	2.79
Cornwall, Ont	3.30	.		3.30			3.15			2.91			2.70		1.
Ottawa, "	3.31	3.28	3.35	3.30	3.14	3.12	3.16	2.95	2.89	2.77	2.65	2.62	2.75	2.84	2.89
Brockville, ,,	3.42	3.39	3.40	3.39	3.30	3.27	3.27	3.10	3.07	2.92	2.70	2.72	2.83	2.92	2.96
Kingston, ,,	3.39	3.35	3.34	3.36	3.25	3.22	3.23	3.08	3.01	2.89	2.74	2.71	2.80	2.91	2.96
eterborough "	3.36	.		3.39			3.27			2.87		.			
l'oronto, "	8.39	3.32	3·34	3· 36	3.53	3·2 3	3.21	3.03	2.98	2.85	2.70	2.74	2.85	2.94	3.03
Port Dover, "	3.40	3 31	3.36	3.36	3.24	3.24	3.24	3.07	3.00	2.90	2.71	2.80	2.90	2.93	3.06
Port Stanley, "	3.38	3.30	3.32	3.33	3.23	3·23	3.22	3.07	3.02	2.93	2.75	2.83	2.92	2.95	3.07
Vindsor, "	3.42	.		3.35			3.26	١ .		3.00			3.03		.
Franton, ,,	3.38	[. [. 1	3.36			3.23		.	2.91	•		2.92		
tratford, ,,	3.40		. [3.36			3 ·2 6		·	2.92					
oderich, "	3.38	.	.	3·31			3 · 23		.	2.85	•		2.92		
Cincardine, ,,	3.36	3.12	3.31	3.20	3:19	3·20	3·16	2.99	2.96	2 81					3.06
angeen, "	3-33	3.30	3.34	3.28	3.27	3.17	3 15	3.01	2.93	2.88	2.75	2.79	2.98	3.00	3.05
tayner, ,,	3 37	3.22	.	3,30	3·17	. !	3.14	2.98		2.75	2.70				 •
arry Saund, "	3-37	3.29	3.33	3.29	3.19	3·19	3.13	3.00	2.94	2.76	2 66	2.79	2.88	2.97	3.08
di ila Ciarcia ,,	3.34			3.24	•	.	3.10		.	2.71	.		2.95	•	
ort Garry, Man.	3.05	2.88	2.88	2.90	2.82	2.81	2 · 83	2 87	3.02	3.16	3.08	3.07	2.99	2.67	2 62

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich

7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m.

Stations.	14tl	o Octo	ber.	15tl	ı Octo	ber.	16 t l	o Octo	ber,	17t	h Octo	ber.	18tl	a Octo	ber.
Glace Bay, N.S.	° 51	°	,	50		9	52		.	o 54		l °	52		l °
Sydney, ,,	50	49	48	50	49	49	54	52	50	53	53	51	57	59	62
Guysborough, ,,	47			40			46			48			57		
Halifax, ,,	47	46	38	44	51	43	48	55	46	52	52	54	56	50	53
Charl'town, PEI.	46	44	42	44	53	48	49	56	49	51	57	53	54	52	52
Chatham, N. B.	39	44	34	42	53	45	45	57	45	42	59	52	52	52	44
Bathurst, ,	42			46			53			45		! •			
Father Point, Q.		,													
Quebec, ,,	40	55	44	40	51	45	44	56	48	48	60	50	44	44	36
Montreal, ,,	38	48	41	39	51	47	44	59	50	47	60	53	41	45	38
Cornwall, Ont.	40			40			43			52			40		١.
Ottawa, ,,	39	48	40	36	56	45	41	62	50	48	57	49	37	42	39
Brockville, ,,	36	44	3 8	43	48	45	51	56	50	49	57	50	38	40	37
Kingston, ,,	33	42	42	46	51	51	45	56	53	54	58	51	39	41	38
eterborough, ,,	35			32			35			40					
Coronto, ,,	37	44	37	34	53	40	41	56	47	43	56	47	40	43	33
Port Dover, ,,	30	47	34	3 2	54	37	41	58	50	51	59	47	39	50	33
Port Stanley, ,,	28	47	34	31	55	37	41	59	41	40	60	45	37	48	32
Windsor, ,,	25			36		•	45			43			42		
Franton, ,,	29			32			38		.	44	.		37		
stratford, ,,	29			31	·.		36			44	.				
doderich, ,,	34			43			43			52			47		
Kincardine, ,,	3 3	49	40	40		46	45		55	53		49			37
Baugeen, ,,	31	47	35	39	53	43	41	55	51	51	50	48	42	41	23
Stayner, ,,	28	43		33	52		48	55	٠.	52	52				
Parry Sound, ,,	31	45	32	33	54	36	35	5 6	39	51	51	40	35	40	31
Attle Current ,,	.33			49			49			50	.]		36		
Fort Garry, Man.	31	61	49	41	59	5 0	64	65	37	30	58	42	33	66	53

TABLE I.—Barometer at 322 Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. 4 25 p.m. 9 43 p.m.

Greenwich 0 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

Glace Bay, N.S. Sydney, ,, 2.16 Guysborough, ,, 2.26 Halifax, ,, 2.31 Charl'town, PEI. 2.28 Chatham, N.B. 2.36 Bathurst, ,, 2.31 Father Pcint, Q. Quebec, ,, 2.71 Montreal, ,, 2.83 Cornwall, Ont. 2.87 Ottawa, ,, 2.95 Brockville, ,, 3.03 Kingston, ,, 3.03 Kingston, ,, 3.03 Peterborough, ,, 3.06 Toronto, ,, 3.07 Port Dover, ,, 3.12 Port Stanley, ,, 3.13 Windsor, ,, 3.20 Granton, ,, 3.16 Stratford, ,, 3.17	2·44 3 2·34 6 2·29 2·68 2·84	2·56 2·42 2·37 2·74 2·91	2.62 2.69 2.66 2.56 2.56 2.90 2.91 2.90 2.92	2·84 2·78 2·75	2·94 2·88 2·83 ·	3·08 3·09 3·12		3·23 3·15 3·10	3	3·13 3·17 3·21	3·28 3·28 3·32	3.34	3·43 3·46 3·45	
Guysborough, ,, 2 · 20 Halifax, ,, 2 · 31 Charl'town, PEL 2 · 28 Chatham, N.B. 2 · 35 Bathurst, ,, 2 · 31 Father Pcint, Q Quebec, ,, 2 · 71 Montreal, ,, 2 · 83 Cornwall, Ont. 2 · 87 Ottawa, ,, 2 · 95 Brockville, ,, 3 · 03 Kingston, ,, 3 · 03 Toronto, ,, 3 · 07 Port Dover, ,, 3 · 12 Port Stanley, ,, 3 · 13 Windsor, ,, 3 · 20 Granton, ,, 3 · 16	2·44 3 2·34 6 2·29	2·56 2·42 2·37 2·74 2·91	2.62 2.69 2.66 2.56 2.56 2.90 2.91 2.90 2.92	2·84 2·78 2·75	2·94 2·88 2·83 ·	3·04 3·09 3·08 3·12 3·29 3·39	3·16 3·15 3·13	3·23 3·15 3·10	3·07 3·17 3·08 3·05 3·01	3·13 3·17 3·21	3·28 3·28 3·32	3·34 3·42 3·41 3·45 3·46	3·43 3·46 3·43	3:50 3:50 3:46
Halifax, ,, 2 31 Charl'town, PEI 2 28 Chatham, N.B. 2 36 Bathurst, ,, 2 31 Father Point, Q. Quebec, ,, 2 71 Montreal, ,, 2 83 Cornwall, Ont. 2 87 Ottawa, ,, 2 95 Brockville, ,, 3 03 Kingston, ,, 3 03 Peterborough, ,, 3 06 Toronto, ,, 3 07 Port Dover, ,, 3 12 Port Stanley, ,, 3 13 Windsor, ,, 3 20 Granton, ,, 3 16	2·44 2·34 2·29 2·68 2·84	2·42 2·37 2·74 2·91 2·93	2·69 2·66 2·56 2·56 2·90 2·91 2·90 2·92	2·84 2·78 2·75 2·86 2·92	2·88 2·83 3·05	3·09 3·08 3·09 3·12 3·29 3·39	3·15 3·13 3·25	3·15 3·10	3·17 3·08 3·05 3·01	3·17 3·21 3·28	3·28 3·32 3·39	3·42 3·41 3·45 3·46	3·46 3·43	3·50 3·46
Charl'town, PEI. 2 28 Chatham, N.B. 2 36 Bathurst, ,, 2 31 Father Pcint, Q. Quebec, ,, 2 71 Montreal, ,, 2 83 Cornwall, Ont. 2 87 Ottawa, ,, 2 95 Brockville, ,, 3 03 Kingston, ,, 3 06 Toronto, ,, 3 07 Port Dover, ,, 3 12 Port Stanley, ,, 3 13 Windsor, ,, 3 20 Granton, ,, 3 16	2·34 2·29 2·68 2·84	2·42 2·37 2·74 2·91 2·93	2.66 2.56 2.56 2.90 2.91 2.90 2.92	2·78 2·75 2·86 2·92	2·88 2·83 3·05	3·08 3·09 3·12 3·29 3·39	3·15 3·13 3·25	3·15 3·10	3·08 3·05 3·01 3·24	3·17 3·21 3·28	3·28 3·32 3·39	3·41 3·45 3·46	3·46 3·43	3·50 3·46
Chatham, N.B. 2 36 Bathurst, ,, 2 31 Father Point, Q. 2.71 Montreal, ,, 2 87 Cornwall, Ont. 2 87 Ottawa, ,, 2 95 Brockville, ,, 3 03 Kingston, ,, 3 06 Toronto, ,, 3 07 Port Dover, ,, 3 12 Port Stanley, ,, 3 13 Windsor, ,, 3 20 Granton, ,, 3 16	2·29 2·68 2·84 2·92	2·37. 2·74 2·91	2·56 2·56 2·90 2·91 2·90 2·92	2·75 2·86 2·92	2·83 3·05	3·09 3·12 3·29 3·39	3.13	3·10 3·23	3·05 3·01 3·24	3·21 3·28	3.32	3·45 3·46	3:43	3.46
Bathurst, ,, 2 31 Father Point, Q. Quebec, ,, 2 71 Montreal, ,, 2 83 Cornwall, Ont. 2 87 Ottawa, ,, 2 95 Brockville, ,, 3 03 Kingston, ,, 3 03 Peterborough, ,, 3 06 Toronto, ,, 3 07 Port Dover, ,, 3 12 Port Stanley, ,, 3 13 Windsor, ,, 3 20 Granton, ,, 3 16	2·68 2·84 2·92	2·74 2·91	2·56 2·90 2·91 2·90 2·92	2:86 2:92	3:05	3·12 3·29 3·39	3:25	3.23	3·01 3·24	3 28	3:39	3.46		
Father Point, Q. Quebec, ,, 2.71 Montreal, ,, 2.83 Cornwall, Ont. 2.87 Ottawa, ,, 2.95 Brockville, ,, 3.03 Kingston, ,, 3.03 Peterberough, ,, 3.06 Toronto, ,, 3.07 Port Dover, ,, 3.12 Port Stanley, ,, 3.13 Windsor, ,, 3.20 Granton, ,, 3.16	2·68 2·84 2·92	2·91 2·93	2·90 2·91 2·90 2·92	2.92	(C)	3·29 3·39	100		3·24	r i	1		3.45	
Quebec, ,, 2.71 Montreal, ,, 2.83 Cornwall, Ont 2.87 Ottawa, ,, 2.95 Brockville, ,, 3.03 Kingston, ,, 3.03 Peterberough, ,, 3.07 Port Dover, ,, 3.12 Port Stanley, ,, 3.13 Windsor, ,, 3.20 Granton, ,, 3.16	2·84 2·92	2·91 2·93	2·91 2·90 2·92	2.92	(C)	3.39	100		3	r i	1		3.45	3.47
Montreal, ,,, 2 · 83 Cornwall, Ont. 2 · 87 Ottawa, ,, 2 · 95 Brockville, ,, 3 · 03 Kingston, ,, 3 · 03 Peterborough, ,, 3 · 06 Toronto, ,, 3 · 07 Port Dover, ,, 3 · 12 Port Stanley, ,, 3 · 13 Windsor, ,, 3 · 20 Granton, ,, 3 · 16	2·84 2·92	2·91 2·93	2·91 2·90 2·92	2.92	(C)	3.39	100		3	r i	1	3.48	3.45	3.47
Cornwall, Ont. 2 87 Ottawa, ,, 2 95 Brockville, ,, 3 03 Kingston, ,, 3 03 Toronto, ,, 3 07 Port Dover, ,, 3 12 Port Stanley, ,, 3 13 Windsor, ,, 3 20 Granton, ,, 3 16	2.92	2.93	2·90 2·92		3.13	ì	3.34	3 34	3 34	2.00		1	1	P. 1984
Ottawa, ,, 2 95 Brockville, ,, 3 03 Kingston, ,, 3 03 Peterborough, ,, 3 06 Toronto, ,, 3 07 Port Dover, ,, 3 12 Port Stanley, ,, 3 13 Windsor, ,, 3 20 Granton, ,, 3 16	2.92		2.92	2.02		3.40				0 20	3.35	3.46	3:39	3.39
Brockville, ,, 3 · 03 Kingston, ,, 3 · 03 Peterborough, ,, 3 · 06 Toronto, ,, 3 · 07 Port Dover, ,, 3 · 12 Port Stanley, ,, 3 · 13 Windsor, ,, 3 · 20 Granton, ,, 3 · 16			1	2.00	1			1.	3.35			3.39		
Kingston, ,, 3:03 Peterborough, ,, 3:06 Toronto, ,, 3:07 Port Dover, ,, 3:12 Port Stanley, ,, 3:13 Windsor, ,, 3:20 Granton, ,, 3:16	3.06	3.10	1	14 04	3:20	3.43	3.33	3.31	3:34	3:30	3 · 31	3.43	3.39	3.40
Peterberough, ,, 3:06 Toronto, ,, 3:07 Port Dover, ,, 3:12 Port Stanley, ,, 3:13 Windsor, ,, 3:20 Granton, ,, 3:16	1.	3 10	3:04	3.03	3.18	3.49	3.46	3.47	3.47	3:40	3.42	3.47	3 · 39	3.42
Toronto, ,, 3 07 Port Dover, ,, 3 12 Port Stanley, ,, 3 13 Windsor, ,, 3 20 Granton, ,, 3 16	3.01	3:04	3.02	3.00	3:15	3.47	3.44	3.44	3.34	3.26	3.41	3.42	3.41	3.38
Port Dover, ,, 3:12 Port Stanley, ,, 3:13 Windsor, ,, 3:20 Granton, ,, 3:16	.		3.08			3 46		.	3.43			3.39		
Port Stanley, ,, 3:13 Windsor, ,, 3:20 Granton, ,, 3:16	3:05	3.04	3.04	3.00	3.17	3.42	3.41	3.43	3:40	3.32	3.33	3.33	3.27	3 27
Windsor, ,, 3 20 Granton, ,, 3 16	3.07	3.07	3.11	3:07	3.16	3:40	3 · 36	3.39	3.40	3.28	3.29	3.30	3 23	3.26
Granton, ,, 3.16	3.08	3.10	3·11	3.08	3.16	3.34	3.37	3.39	3:36	3.27	3.27	3.27	3 20	3 23
S4463		l . i	3 18			3.39	•		3 40	٠. ا		3.29		
Stratford 3:17		.	3·12			3.38			3 42			3.29		
- ,, o 11		.	3 11			3.41			3 43	.]		3.33		
Goderich, " 3·16	.	i .	3.08			3.42		. !	3.41	.	.	3.28		• •
Kincardine, ,, 3.13	3.10	3.62	3.04	3.07	3.23	3.41		3 40	3:38	3.30	3·29 ¦	3.31	3 21	3 24
Saugeen, , 3:11	3.05	3.07	3.10	3.06	3 24	3.44	3.36	3 39 S	3-38	3 27	3 29	3·29	3.54	3 · 22
Stayner, , 3.04	3.05	. !	3.03	3.03		3 39	3 33	.]3	39	3.27	.	3.30	3 24	
Parry Sound, ,, 3:10	3.04	3.00	2.94	3.05	3.27	3.43	3 39	8·41 3	42	3 · 33	3.36	3 35	3.24	3 29
Taithe Current ,, 3-11	1 1	. !	2.90	. !		3:45		. 3	:38		. !	3:32		
Fort Garry, Man. 2:68		3.15	1-28	3-30	3-33	34	16	3-14	10 2	95 2	2.93	87	3.71	2.75

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Station		19	h Oc	tober.	20	th Oc	tober.	2	1st O	tober	. 2	2nd Ò	ctober.	. 2	3rd Oo	tober
Glace Bay,	N.S.	9	1 .			l°.	1 .	4				4 ,	1	- -		-0
Sydney,	"	58	49	43	44	42	42	1 '		3 3	- 1	1	3 4	- 1 -	1 :	8
Guysboroug		55	.		4.3	1 1		46	3 .	1.	4	0 .		30		
Halifax,	**: •: **	46	44	44	43	42	47	49	4	4 3	7 4	4 4	7 3	1		3
Charl'town,]	PEI.	45	45	43	*	42	46	44	4	3 4	4 4	4 4		3 38	1	3
Chatham,	N.B.	42	45	41	38		43	40	4	3 3	8 3	8 4	32	31	40	3
Bathuret,	,,	44	. "		43			41		١.	4	8 .	1.	36	1	.
Father Point	, Q.	•				1.		.	.	.	1.	. .	1.	1.		
Quebec,	,,	38	42	37	35	45	41	36	40	37	3	52	40		47	35
Montreal,	,,	38	42	35	39	53	45	37	4.5	40	3	53	46	37	51	42
	Ont.	39			43			34			37	.		36	1.	١.
ttaws,	7	3 6	45	35	35	53	43	34	47	35	30	53	37	33	58	40
Brockville,	.,	35	41	29	46	53	48	37	48	36	36	52	37	42	51	45
Cingaton,	"	36	47,	36	50,	58	49	37	47	37	37	51	39	37	55	46
sterborough,	,,	31			39	.		37			29	1.		35		
oronto,	,,	30	50	43	46	58	54	45	47	35	32	14	39	45	52	48
ort Dover,	,,	30	55	46	51	57	54	45	56	40	36	56	44	41	51	45
ort Stanley,	,,	27	54	41	47	58	54	47	53	40	38	57	45	45	58	49
indsor,	,,	30	.]	.	44	٠.		50			48			48		
ranton,	,,	25		.	43			42			35			45	.	
ratiord,	>>	27	.	.	43	.	. }	40			33			43	.	•
	,,	34		.	53	.		42			42			48		•
	,,	31	50	53	52	56	49	38		40	49	54	4 5	45	58	51
	,,	29	46	46	53	54	45	31	47	32	36	51	43	42	56	48
aynor,		38	41		55	54	. [37	51		30	4 8		38	56	
Sound,	,,	25	44	33	50	50	42	28	48	28	27	52	32	37	61	47
tle Current	,,	32	.		52		. į	42	•		33		.	45		
rt Garry, Ma	n. :	37	51	31	26	50	32	23	58	47	37	65	55	47	68	55

Table I.—Barometer at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich , 0 43 p.m. 9 43 p.m. 4

4 08 a.m. (of next day.)

Stations.	24t]	a Octo	ber.	25tl	ı Octo	ber.	26 t ì	ı Octo	ber.	27tl	ı Octo	ber.	28t]	h Octo	ber.
Glace Bay, N.S.	3.44			3.26			3·18		.	3.01			2.93		
Sydney, ,,	3.49	3·38	3.33	3· 3 0	3· 23	3.24	3· 2 2	3·10	3.06	3.03	2.97	2.96	2.93	2.84	2 82
Guysborough, ,,	3.48			3.30			3.20			3.01			2.89		
Halifax, ,,	3·54	3.42	3.41	3.39	3.28	3·28	3.25	3.12	3.09	3.05	2.94	2.92	2.88	2.83	2.83
Charl'town, PEI.	3.20	3.39	3.36	3.34	3· 2 5	3.26	3.23	3.10	3.03	2.99	2.90	2.89	2.86	2 83	2.86
Chatham, N.B.	3.46	3.35	3.34	3.33	3.22	3.25	3.22	3.01	2.95	2.90	2.79	2.79	2.79	2.82	2.89
Bathurst, ,,	3.46						3.28			2.85	٠.		2.79		
Father Point, Q.															
Quebec, ,,	3.47	3.43	3.40	3.42	3·31	3· 3 0	3.24	3.07	2.93	2.84	2.78	2.77	2.88	2.94	3.00
Montreal, ,,	3.43	3.37	3.38	3.41	3 32	3.27	3.23	3.02	2.93	2.88	2.76	2.81	2.97	2.97	2.97
Cornwall, Ont.	3.40			3:37			3.21			2.87			2.97		
Ottawa, ,,	3.44	3.32	3.39	3.42	3 30	3.30	3.21	3.05	2.96	2.87	2.84	2.93	3.02	2.96	2.97
Brockville, ,,	3.47	3.43	3.45	3.48	3.38	3.37	3.31	3.16	3.08	3 00	2.94	2.98	3.11	3.07	3.05
Kingston, ,,	3.43	3.41	3.45	3.48	3.40	3.35	3.32	3.11	3.03	2.99	2.94	2.96	3.03	3.02	2.98
Peterborough, ,,	3.33		.			•	3· 21			2.95			3.02		
Toronto, ,,	3.33	3.31	3.33	3.37	3.28	3.28	3.22	3.04	2.99	3.00	2.98	3.01	3.03	2.93	2.82
Port Dover, ,,	3.32	3 · 28	3.33	3 · 37	3.29	3.28	3.25	3.10	3.04	3.02	2.99	3.05	3.07	2.92	2.77
Port Stanley ,.	3 · 27	3 27	3.31	3.34	3.27	3.28	3.23	3.10	3.05	3.03	3.03	3.05	3.06	2.88	2.74
Windsor, ,,	3.30			3.36			3.26			3.09			3.06		
Granton, ,,	3.30		.	3.36			3.22			3.03			3.06		
Stratford, ,,	3.32		.				3.23		.	3.01			3.06		j .
Goderich, ,,	3.28] .	3.34			3.19			3.06			3.05		
Kincardine, ,,	3.28	3.25	3 30		3.23	3.23	3.17	3.03	3.02	3.06	3.05	3.05	3.04	2.87	2.63
Saugeen, ,,	3.26	3.25	3 · 32	3.32	3.23	3.19	3.12	2.99	2.99	3.03	3.02	3.02	3.02	2.87	2.62
Stayner, ,,	3.58	3.26					3.13	2.98		2.97	2.96		3.03	2.91	
Parry Sound, ,,	3.32	3.30	3.32	3.37	3.25	3.24	3.15	2.99	2.98	2.98	2.99	3.03	3.06	2.95	2.83
Little Current, ,,	3.29			3.32			3.08			3.03			3.06	1.	1
Fort Garry, Man.	2.75	2.73	2.72	2.60	2.74	<u> </u>	3·25 40	3.81	3.82	3.59	8.10	3.12	3:03	2.89	2.86

TABLE II .- Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

Greenwich "

0 43 p.m.

Stations.	24 t h	Octol	er.	25th	Octo	per.	26th	Octo	ber.	27th	Octo	ber.	28th	Octob	oer.
Glace Bay, N.S.	45	°	•	53	°		52		0	°	0		49	:	0
Sydney, ,,	43	42	41	48	47	37	50	53	45	52	49	49	49	49	43
Guysborough, ,,	35	.		40	. }		42			50			48	.	
Halifax, ,,	38	44	35	38	50	42	42	47	46	45	48	44	45	49	48
Charl'town, PEI.	41	48	45	46	53	47	48	48	48	50	54	51	52	53	50
Chatham, N.B.	30	50	37	37	56	39	38	61	53	52	59	53	51	51	47
Bathurst, ,,	32	.		.	.		42			55	.	. 1	52 j	.	
Father Point, Q.	•			, ,	.		. }			.			.	.	
Quebec, ,,	33	55	47	41	57	47	44	56	55	56	56	55	47	16	4
Montreal, ,,	37	56	48	47	58	55	52	62	57	58	59	52	44	44	4
Cornwall, Ont.	37			45			54			59			50		
Ottawa, "	39	58	49	46	57	52	50	64	60	- 52	58	46	38	45	3
Brockville, "	41	60	48	50	59	53	53	60	59	55	56	49	40	45	4.
Kingston, "	53	59	52	52	58	52	53	53	57	54	57	51	45	47	4
Peterborough, ,,	42						44			54		١.	40		
Toronto, ,,	47	57	52	51	58	50	49	61	55	50	55	50	50	49	4
Pert Dover, "	44	63	51	52	62	52	54	59	56	57	· 57	45	43	51	5
Port Stanley, "	50	60	49	48	61.	47	51	62	59	59	54	44	43	51	5
Windsor, "	52			59			54			60			49		
Granton, ,,	48	١.		51			54			56	 .		44		
Stratford, ,,	-47	١.					55		ļ .	55			45	•	
Goderich, "	55	١.		56			60		١.	54		١.	47		
Kincardine, ,,	51	64	59		69	59	60	63	60	52	48	47	46	49	
Saugeen, ,,	48	56	55	53	64	56	56	62	53	49	46	46	43	48	4
Stayner, "	43	, 59		١.	١.		63	65		54	46	١.	41	45	
Parry Sound, "	43	58	54	52	61	54	50	59	55	51	45	41	38	44	'
Little Current ,,	49			52			56		!	47			40		
Fort Garry Man.	47	60	56	57	49	39	33	39	35	21	44	24	22	37	

TABLE I.—Barometer at 32? Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich " 0 43 p.m. 9 43 p.m.

4 08 a.m. (of next day.)

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	29t	h Octo	ber.	30t	h Octo	ber.	31s	t Octo	ber.	1st	Nover	aber.	2nd	Nove	nber.
Glace Bay, N.S.	2.86			2.81			2.79			2.79			3.01	,	
Sydney, "	2.89	2.99	3.01	2.30	2.68	2.70	2.80	2.81	2.80	2.82	2.86	3.02	3.04	3.03	3:21
Juysborough, "	2.89			2.83			2.80		.	2.76			3.02		•
Halifax, ,,	2.94	2.98	2.95	2.77	2.72	2.75	2.82	2.78	2.80	2.73	2.94	3.02	3.02	3.17	3:27
Charl'town,PEI.	2.99	3.04	2.96	2.75	2.66	2.73	2.80	2.78	2.81	2.77	2.92	3.01	3.06	3.16	3.35
Chatham, N.B.	3.02	3.03	2.87	2.62	2.65	2.66	2.75	2.76	2.81	2.80	2.89	2.88	3.04	3.12	3.20
Bathurst, ,,	3.08] .	2.61			2.75		.			.	3.07		
Father Point, Q.					,	,	•					.	•		
Quebec, ,,	3.14	2.74	2.64	2.63	2.70	2.76	2.81	2.85	2.83	2.93	2.95	2.38	3.08	3.18	3.27
Montreal, ,,	2.86	2.58	2.57	2.70	2.77	2.81	2.86	2.85	2.86	2.94	2.89	2.95	3.13	3.22	3.56
Cornwall, Ont.	2.75		١.	2.71			2.86			2.90			3.13		
)ttawa, "	2.76	2.21	2.62	2:75	2.80	2.85	2.88	2.90	2.91	2:90	2.84	2.89	3·1 5	3.10	3.23
Brockville, ,,	2.80	2.59	2.68	2.85	2.92	2.93	2.99	3.00	3.00	3.00	2.94	3.02	3· 2 6	3.28	3.31
Kingston, ,,	2.74	2.57	2.71	2.83	2.86	2.89	2.88	3.02	3.03	2.93	2.90	2.84	3.27	3.24	3.33
Peterborough "	2.69			2.78			2.92						3.22		
Coronto, "	2.59	2.26	2.74	2.87	2.90	2.94	2.91	2.94	2.98	2.92	2.89	3.05	3·19	3.13	3 15
Port Dover, ,,	2.58	2.60	2.80	2.92	2.96	2.98	2.97	2.99	3.06	2.95	2·9 5	3.12	3.20	3.14	3.14
Port Stanley ,,	2.62	2.70	2.83	2.93	2 8 8	3.02	2.99	3.02	3.07	3.00	2.96	3.068	3.19	3.13	3.13
Windsor, ,,	2.61			3.03			3.09			3.02			3.24		•
Franton, ,,	2.60			2.80			2.97			2.95			3.21	•	
Stratford, ,,	2.58	•		2.91	•		2.97						3·21		
Hoderich, "	2.49			2.88			2.99		j	2.91			3.19		
Kincardine, ,,	2.46		2.72	2.86	2.80	2.30	2.96		2.93			3.07	3·16	3.06	3.00
saugeen, "	2.51	2.58	2.67	2.85	2.86	2.89	2.98	3.02	2.93	2.88	2.88	3.04	3·17	3.05	3.03
stayner, ,,	2.53	2.59		2.78	2.87		2.91	2.95		٠		.	3.16	3.08	•
Parry Sound, ,,	2.21	2.54	2.63	2.79	2.86	2.92	2.96	2.98	2.91	2.78	2·83	3.06	3.19	3.11	3.08
Little Current ,,	2.35			2.80			3:03		•	2.73		.	3.15		•
Fort Garry, Man.	2.92	3.08	3.24	3.41	3.45	3.40	3.14	2.83	2.95	3.02	2.82	2.72	2.68	2.74	2.82

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich

0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations.	29th October.			30th October.			31st October.			1st November.			2nd November.		
Glace Bay, N.S.	49	9	0	51	٥١	9	47	•	Q	47	0	•	37	8	q
Sydney, ,,	49	45	41	50	53	50	49	47	45	46	43	35	39	41	38
Guysborough, ,,	50			49			46			48			32	.	
Halifax, ,,	50	49	51	55	54	49	43	49	43	48	41	84	39	38	31
Uharl'town,PEI.	47	43	44	52	55	47	47	48	43	46	3 9	35	40	37	35
Chatham, N.B.	39	41	42	45	49	45	40	45	37	36	39	31	32	38	29
Bathurst, ,,	37			45			41			.			34		•
Father Point, Q.						,								.	•
Quebec, ,,	36	36	41	46	46	40	36	36	34	32	33	32	33	38	35
Montreal, "	40	57	56	47	49	43	36	39	35	30	36	85	85	38	37
Ohatham, Ont.	46			48	•		37	.		33			37	.	
Ottawa, "	41	49	47	46	48	39	34	36	29	31	40	83	35	38	36
Brockville, "	45	60	57	46	46	43	35	35	32	33	35	34	35	37	86
Kingston, "	51	58	49	47	45	42	3 8	38	33	87	35	36	81	40	41
Peterborough, ,,	48			45			36						27		•
Toronto, "	52	58	48	45	44	39	34	38	35	36	87	33	35	42	31
Port Dever, "	60	58	46	44	41	36	32	39	32	35	36	36	36	47	48
Port Stanley, "	60	48	45	42	41	37	33	37	83	34	3,6	37	29	47	80
Windsor, ,,	60			40			31			30			25		
Granton, ,,	57			39			30			30			32		
Stratford, ,,	56			40			32						34		
Goderich, "	58			43			35			35		.	38		٠,
Kincardine, "	56		48	44	43	41	35		38			37	38	45	41
Saugeen, ,,	55	46	47	43	39	35	33	32	35	37	37	36	32	39	37
Stayner, "	51	47		43	39		33	32					34	37	
Party Sound, "	48	48	47	43	42	33	30	28	34	37	34	31	32	39	3
Little Current ,,	50			37			27			34			31		
Fort Garry, Man.	27	25	22	19	27	10	13	40	28	32	38	27	21	3 8	2

TABLE I.—Baremeter at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

10 50 p.m.

Greenwich "

0 43 p.m.

4 25 p.m. 9 43 p.m.

The Height of the Barometer=27 inches + the numbers in the Table.

Stations.	3rd	Nover	nber.	4th	Noven	aber.	5th	Noven	nber.	6th	Nover	nber.	7th	Nover	nber.
Glace Bay, N.S.	3.40			3.36			3.53			2.79			2.92		
Sydney, "	3.40	3.43	3.42	3.38	3.30	3.28	3.25	3.03	2.90	2.79	2.68	2.67	2.96	3.53	3.33
Guysborough, ,,	3.43		١.	3.38			3.53			2.78			2.95		•
Halifax, ,,	3.44	3.43	3.41	3.41	3.30	3.29	3 · 26	3.06	2.96	2.80	2.63	2.66	3.06	3.31	3.38
Charl'town, PEI.	3.43	3.39	3.37	3.36	3.58	3.28	3.23	2.98	2.86	2.78	2.68	2.75	3.12	3.38	3.43
Chatham, N.B.	3.37	3.26	3.24	3.29	3.22	3 22	3.14	2.83	2.78	2.73	2.66	2.90	3.29	3.44	3.48
Bathurst, ,,	3.25	.		3.26			3.09			2.72			3.34		.
Father Point, Q.	١.							.	·						
Quebec, ,,	3· 2 5	3.18	3.22	3.27	3.26	3.20	3.05	2.86	2.83	2.65	2.86	3.12	3.35	3.42	3.37
Montreal, ,,	3.24	3.18	3.22	3-28	3.21	3 15	3.01	2.86	2.84	2.77	3.04	3.24	3.42	3.38	3.30
Cornwall, Ont.	3.20			3.24	.		2.92			2.82	•		3.39		
Ottawa, ,,	3.19	3.12	3.12	3.25	3.17	3.13	2.93	2.84	2.84	2.82	3.12	3.31	3.44	3.35	3.27
Brockville, "	3.29	3.25	3.28	3.32	3.24	3.53	3.07	2.98	2.97	3.04	3.22	3.36	3.50	3.42	3.36
Kingston, "	3.22	3.20	3.22	3.29	3.24	3.17	3.04	2.97	2.94	3.07	3.16	3.37	3.47	3.37	3.28
Peterborough, ,,	3.16			3.28	.		2.94			3.08			3.40		
Toronto, ,,	3.17	3·1 2	3.20	3.22	3.11	3.05	2.95	2.89	2.93	3.14	3.22	3.39	3.39	3.28	3.14
Port Dover, "	3.12	3.13	3.50	3 22	3.10	3.05	2.98	2.95	2.96	3.19	3.27	3.38	3.37	3.24	3.13
Port Stanley, ,,	3.14	3 13	3.18	3.19	3.07	3.04	2.98	2.95	2.98	3.21	3.27	3.36	3.33	3.22	3.12
Windsor, ,,	3.12			3· 2 1			2.98			3.34			3.36		.
Granton, "	3.12			3.22		.	2.95			3.21	.		3.37		
Stratford, "	3.12			3.22			2.95			3.27	.	.	3.38		
Goderich, "	3.10	.		3.18		.	2.88	·•		3.24	.		3.33		
Kincardine, "	3.05	3.04	3.11	3.14		2.87	2.82	2.82		3.17	3.28	3.33	3.34	3.13	3.0
Saugeen, ,,	3.12	3.00	3.08	3.17	2.98	2.88	2.90	2.76	2.82	3.16	3.31	3.34	3.40	3.10	3.00
Stayner, ,,	3.04	3.01	.	3.14	3.01		2.82	2.78		3.08	3.28	.	3.35	3.19	.
Parry Sound, "	3.04	3.02	3.12	3.17	3.02	2.93	2.82	2.81	2.78	3.05	3.25	3.35	3.37	3.13	3 0
Little Current ,,	2.92			3.05			2.68			3.04			3 24		
Fort Garry, Man.	2 87	2.65	2.65	2.64	2.42	2.42	2.44	2.61	2.90	2.05	2.57	2.49	2.64	2.70	2.6

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich 0 43 p.m.

4 25 p.m. 9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

Stations.	3rd 1	Novem	ber.	4th 1	¶ovem	ber.	5th N	Tovem	ber.	6th N	Tovem	ber.	7th N	ovem	ber.
Glace Bay, N.S.	38	0	٥	40	°		°		•	45	°	0	43		°
Sydney, "	37	34	37	43	45	38	44	49	48	47	48	48	42	40	37
Guysborough, ,,	33			38			36			47			44	·	,
Halifax, ,,	35	43	40	43	44	36	33	46	49	49	51	49	42	37	34
Charl'town, PEI.	36	45	45	44	49	42	45	49	49	49	48	47	39	35	35
Chatham, N.B.	29	43	40	37	46	40	37	51	46	46	49	41	35	32	28
Bathurst, ,,	33			37			36			44			35		
Father Point, Q.									١.	.					
Quebec, ,,	38	\45	40	35	45	37	34	44	47	51	45	42	37	36	36
Montreal, ,,	34	46	42	38	41	42	41	51	51	50	48	43	40	45	39
Cornwall, Ont.	34			37			43			50			38		
Ottawa, ,,	31	49	42	37	48	38	41	50	52	48	48	42	35	47	40
Brockville, "	35	48	45	39	46	44	44	50	52	48	50	42	33	44	36
Kingston, "	45	51	50	46	50	49	48	50	52	47	55	40	37	49	47
Peterborough, ,,	31			33			47		į ,	45			31		١.
Toronto, "	33	49	40	34	46	37	48	49	50	43	54	37	36	45	42
Port Dover, "	47	52	48	46	52	49	51	52	55	46	55	39	38	55	39
Port Stanley, "	50	54	52	50	54	53	52	54	53	43	54	36	50	53	52
Windsor, ,,	44			43			52			40			40		
Granton, "	35			37			49			43			39		٠.
Stratford. ,,	40			40			49			43			38		١.
Goderich, "	43			43			53		١.	49			47	١.	
Kincardine, ,,	44	55	50	50		55	53	57	١.	49	51	41	39	61	52
Saugeen, ,,	42	54	48	41	53	53	51	55	54	48	48	36	37	61	49
Stayner, ,,	45	53		47	49		55	55	١.	47	42		35	47	,
Parry Sound, "	33	50	35	34	- 51	49	50	53	54	47	47	34	37	53	45
Little Current,,	44			47			51			45			43	١.	١.
Fort Garry, Man.	22	37	25	20	48	34	30	39	19	20	46	40	31	34	30

Table I.—Barometer at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

Greenwich "

0 43 p.m.

4 08 a.m. (of next day.)

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	8th	Noven	aber.	9th	Noven	nber.	10th	Nove	nb er.	11 t h	Nove	mbe r.	12th	Nover	nber.
Glace Bay, N.S.	3.35			2.95			2.40			2 55			2 55		
Sydney, ,,	3·37	3.27	3.16	2.97	2.74	2.60	2.40	2.33	2:37	2.60	2.51	2.38	2.57	2.73	2.86
Guysborough, ,,	3· 37			2.95			2.45		! !	2.65			2.63		
Halifax, ,,	3.42	3.27	3.18	3.00	2.80	2.65	2.57	2.58	2.68	2.72	2.47	2.52	2.72	2.84	2.96
Charl'town, PEI.	3.45	3.30	3.19	3.00	2.83	2.67	2.54	2 ·51	2.55	2.66	2.46	2.43	2.62	2.76	2-88
Chatham, N.B.	3.45	3.24	3.11	2.97	2.79	2.68	2.62	2.59	2.61	2.61	2.41	2 46	2.61	2.73	2.86
Bathurst, ,,				2.99		١.	2.61			2.62		,	2.57		
Father Point, Q.															
Quebec, ,,	3.23	3.04	2.95	2.90	2.79	2.82	2.83	2 ·80	2.83	2.65	2.63	2.79	2.87	2.96	3.05
Montreal, ,,	3.18	2.99	2.91	2.89	2.82	2.84	2.99	2.87	2.74	2.67	2.82	2.96	3.06	3.12	3.23
Cornwall, Ont.	3.11			2.88			3.00		į .	2.66			3.10	١.	
Ottawa, "	3.23	2.94	2.86	2.83	2.83	2.31	3.05	2.85	2.76	2.67	2.93	3.03	3.14	3.13	3.24
Brockville, "	3.24	3.03	3.01	2.98	2.96	3.01	3.13	2.92	2.80	2 83	3.03	3.14	3.24	3· 2 9	3.35
Kingston, "	3.18	3.00	2.96	2.96	2.95	3.02	3.07	2.87	2.75	2 83	3.02	3.16	3.24	3.24	3.31
Peterborough, ,,				2.93			3.03	! •		2.91			3.24		
Toronto, ,,	3.05	2.90	2.93	2.94	2.92	2.99	2.99	2.73	2.80	2.92	3.08	3.17	3.25	3.31	3.35
Port Dover, "	3.05	2.91	2.95	2.94	2 95	3.00	2.95	2.73	2.83	2.99	3.13	3.18	3.28	3.31	3.37
Port Stanley, "	3.04	2.92	2.98	2.96	2.96	3.01	2.95	2:78	2.87	3.03	3.14	3.19	3.27	3.32	3.38
Windsor, "	2.99			3.04			2.93			3.15			3.40		
Granton, ,,	3.01	•		2.97			2.95		-	3.03			3.30		
Stratford, ,,				2.97			2.98			3.02			3 · 30		
Goderich, "	2.89			2.95		.	2.90			3.08			3.31	.	
Kincardine, ,,	2 87	2.82	2.91	2.92		3.01	2.87	2.75	2.83	3.00	3 14	3.50	3 · 29	3.35	3.36
Saugeen, "	2.87	2.83	2.91	2.89	2.90	2 98	2 90	2.73	2 81	2 98	3.11	3.17	3.28	3.32	3.35
Stayner, "				2.89	2.89		2.97	2.72	.	2.93	3.07		3.53	3.30	
Parry Sound, "	2.89	2.81	2.85	2.90	2.88	2 99	2.99	2.73	2.79	2.94	3.10	3.20	3.29	3.32	3.40
Little Current ,,	2.71	į .		2.81			2.94			3.01	1.	-	3.33		
Fort Garry, Man.	2.62	2.68	2.74	2.80	2.83	2.94	3.03	3.15	3 · 27	3.44	3.54	3.62	3.64	3.58	3.49

1874.

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich ... 7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m. 10 50 p.m. 4 08 a.m. (of next day.)

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m, 10 50 p.m.

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	13th	Nover	mber.	14th	Nover	mbe r.	15th	Nove	mber.	16th	Nove	mber,	17th	Nove	mber.
Glace Bay, N.S.	2.97		.	3.24			3.16			3.07			3.36	Ī.	
Sydney, ,,	3.01	3.18	3.25	3.28	3.24	3.21	3.21	3.19	3.16	3.11	3.16	3.24	3.40	3.46	3.43
Guysborough, ,,	3.04			3 · 36			3.24		•	3.12			3.42		
Halifax, ,,	3.07	3.21	3.25	3.32	3.38	3.37	3.36	3 29	3.25	3.17	3.27	3.40	3.51	3.46	3.41
Charl'town, PEI.	3.03	3.21	3.27	3.36	3.37	3.34	3.33	3.29	3.22	3.18	3.26	3.37	3.21	3.47	3 · 39
Chatham, N.B.	3.04	3.21	3.30	3.45	3.46	3.44	3.40	3.28	3.21	3.23	3.32	3.47	3.57	3.41	3.27
Bathurst, ,,	3.02			3.45						3.22			3.56	.	
Father Point, Q.										ļ.					
Quebec, , ,,	3.18	3.32	3.49	3.64	3.60	3.59	3.44	3.29	3.28	3.41	3.24	3.57	3.23	3.19	3.08
Montreal, ,,	3.33	3.45	3.55	3.70	3.66	3.56		3.27	3.33	3.20	3.26	3.57	3.34	3.08	3.09
Cornwall, Ont.	3.35			3.71			3.26			3.20		١.	3:24		
Ottawa, "	3.43	3.20	3.60	3.70	3.63	3.45	3.24	3.22	3.34	3.52	3.26	3.24	3.23	3.03	3.13
Brockville, ,,	3.43	3.48	3.64	3.79	3.70	3.61	3.34	3.34	3.40	3.60	3.60	3.59	3.30	3.15	3.20
Kingston, ,,	3.47	3.55	3.65	3.77	3.71	3.20	3.33	$3 \cdot 32$	3.43	3.59	3.29	3.25	3.20	3.01	3.19
Peterborough, ,,	3.47			3 68			-			3.55			3.13		
Toronto, ,,	3.49	3.24	3.61	3.70	3.52	3.30	3.18	3.31	3.44	3.58	3.20	3.32	3.05	3.08	3.22
Port Dover, "	3.45	3.21	3.60	3.65	3.45	3.31	3.19	3.33	3.44	3.56	3.45	3.26	3.05	3.08	3 · 24
Port Stanley, ,,	3.45	3.54	3.60	3.62	3·43 v	3.26	3.21	3.33	3.45	3.55	3.41	3.17	3.06	3.10	3.25
Windsor, ,,	3 59		 •	3.60) •		3.31			3.57			3.19		
Granton, ,,	3.49	. !		3.63			3.50			3.26			3.02		
Stratford, ,,	3.49			3.66	.	١.				3.58			3.02	١.	·
Goderich, ,,	3.52			3.59			3· 2 8			3.57			3.01		
Kincardine, ,,	3.49	3.54	3.28	3.62	3.40	3.14	3.17	3.28	3.42	3.54	3.41	3.30	2.98	3.12	3.28
Saugeen, ,,	3.47	3.54	3.29	3.65	3.41	3.56	3.22	3.29	3.20	3.59	3.42	3.25	3.02	3.11	3.23
Stayner, ,,	3·46	3.49		3.68	3.45					3.25	3.42		2.98	5.14	·
Parry Sound, ,,	3.20	3.56	3.65	3.70	3.20	3.26	3.11	3· 2 6	3.41	3.52	3.41	3.33	2.97	3.09	3.23
Little Current ,,	3.51	•		3.60		,	3.07			3.55			2.87		
Fort Garry, Man.	3.26	2.95	2.83	2.76	2.89	3.10	3.30	3.40	3.45	3.45	3·37	3.46	3.55	3.58	3.68

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

Greenwich "

0 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

Stations.	13th	Nover	nber.	14th	Novet	nber.	15th	Nover	nber.	16th	Nove	mber.	17th	Nove	mber.
Glace Bay, N.S.	32	0		 0 34	•	,	32	Q		33	0		36	:	•
Sydney, ,,	33	34	31	33	32	29	31	30	31	34	34	34	35	85	33
Guysborough, ,,	23			2 8			26			25			35	,	١.
Halifax, ,	31	32	29	30	30	29	28	31	30	32	32	33	33	33	35
Charl'town, PEI.	29	30	30	29	29	27	્રીક	27	÷	29	33	35	34	34	36
Chatham, N.B.	26	29	28	21	29	28	20	28	. 28	28	34	29	24	31	33
Bathurst, ,,	28			28						30			29		
Father Point, Q.														١.	
Quebec, ,,	27	28	24	21	30	20	22	30	26	30	31	25	27	29	31
Montreal, ,,	25	27	25	22	24	22		31	34	34	35	32	29	3,9	41
Cornwall, Ont.	25			23			30			33			32		
Ottawa, ,,	24	26	23	21	25	15	26	30	30	34	37	30	30	34	34
Brockville, "	22	23	22	16	26	23	30	39	39	29	38	36	35	44	45
Kingston, ,,	22	25	24	20	. 25	29	36	43	39	31	39	39	44	47	45
Peterborough, ,,	21			8						27			41		.
Toronto, ,,	23	28	21	18	32	32	41	43	31	28	39	41	42	52	42
Port Dover, ,,	27	31	20	21	36	39	46	47	31	28	46	47	48	53	44
Port Stanley, ,,	27	30	25	22	36	43	47	50	29	25	46	47	50	51	43
Windsor, ,	24			30			46	.		32		! •	53		
Granton, ,,	17	. '		20			41	,		27			50		
Stratford, ,,	23			19						27			48		١.
Goderich, ,,	24			25			43			35			50		
Kincardine, "	24	28	25	27	34	35	39	45	44	34	42	42	50	48	39
Saugeen, ,,	23	23	22	16	31	31	41	40	40	31	41	42	40	42	37
Stayner, ,,	20	23		6	27					20	35		38	39	١.
Parry Sound, ,,	20	22	15	13	29	28	38	41	34	34	37	37	39	43	38
Little Current ,,	21			27			39			32			45		
Fort Garry, Man.	18	25	30	25	24	13	13	20	16	13	13	5	-16	3	-12

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Toronto civil time

7 25 a.m.

10 50 p.m.

4 25 p.m. 9 43 p.m. 4 08 a.m. (of next day.) Greenwich " 0 43 p.m. The Height of the Barometer = 27 inches + the numbers in the Table.

Stations,	18th	Nove	mber.	Шөғр	Nove	nber.	20th	Nover	nber.	21st	Nover	nber.	22nd	Nove	mber
lace Bay, N.S.	3.23	 .		2.80)	3.00			2·39			2.48		
Sydney, ,,	3.26	2.94	2.81	2.94	2.92	2.94	3.02	2.93	2.73	2.41	2·36	2.39	2.48	2.75	2 90
Juysborough, "	3.22		 •	2.98			3.05	!	,	2.31			2.60		
Halifax, ,,	3·19	2.90	2.93	3.07	3.02	3.11	3.08	2.80	2.51	2.24	2.22	2.47	2.77	3.00	3·17
Charl'town, PEI.	3.17	2.91	2.95	3.07	3.04	3.06	3.07	2.87	2.63	2.38	2.35	2.46	2.74	2.95	3.10
Chatham, N.B.	3.07	2.90	3.03	3.12	3.07	3.04	3.04	2.81	2.59	2.42	2.42	2.56	2.84	3.05	3.18
Bathurst, ,,	3.03		,	3.15			3.01			2.47					
Father Point, Q.									! •						١.
Quebec, ,,	3.08	3.09	3.29	3.26	3.11	3.10	2.89	2.64	2.21	2.50	2.61	2.85	3.13	3.24	3.18
Montreal, ,,	3·17	3.31	3.36	3.27	3.15	3.06	2.79	2.49	2.41	2.58	2.70	2.96	3.21	3.24.	3 · 18
Cornwall, Ont.	3· 23			3.23			2.75			2.64			3.17		
Ottawa, "	3.24	3.35	3.39	3.23	3.12	3.07	2.74	2.43	2.45	2.58	2.73	2.99	3.19	3.17	3.07
Breckville, ,,	3.35	3.43	3.47	3.38	3.25	3.21	2.84	2.56	2.54	2.74	2.87	3.03	3.32	3.23	3.13
Kingston, ,,	3.32	3.35	3.33	3.33	3.19	3.06	2.71	2.42	2.62	2.64	2.80	3.04	3.24	3.15	2.8
Peterborough, ,	3.29			3.28			2.65			2.59		.			İ٠
l'oronto, ,,	3.35	3.43	3.42	3.33	3.16	3.00	2 64	2.49	2.59	2.74	2.85	2.99	3.07	2.88	2.64
Port Dover, "	3.38	3·43	3.42	3.35	3.17	3.88	2.58	2.57	2.67	2.78	2.91	3.00	3.02	2.80	2.57
Port Stanley, ,,	3.37	3.42	3.42	3.37	3.18	3.00	2.62	2.62	2.73	2.82	2.97	3 02	2.98	2.76	2.50
Windsor, ,,	3.52			3.43			2.66			2 · 91			2.89		
Granton, ,,	3.40			3.35			2.63			2.80			3.00		
Stratford, ,,	3.40			3.35			2.66			2.78		.			١.
Goderich, "	3.45			3.35			2.65			2.80			2.96		
Kincardine, "	3.43	3.45	3.40	3.33	3.16		2.66	2.55	2.53	2.68	2.83	2.97	2.97	2.76	2-4
Saugeen, ,,	3.44	3.43	3.40	3.30	3.13	2 96	2.67	2.55	2.60	2.65	2 84	2.97	3.01	2.76	2.5
Stayner, ,,	3.35	3.40		3.28	3.15		2.61	2.49		2.64	2.82] .	
Parry Sound, ,,	3.41	3.45	3.38	3.30	3.14	2.99	2.57	2.48	2.53	2.64	2.86	3.05	3.09	2.93	2.7
Little Current ,,	3.47			3.27			2.65			2.70			3.03] .
Fort Garry, Man.	3.69	3.59	3.53	3.20	2.93	2.85	2.75	2.80	2.80	2.79	2.69	2.66	2.52	2.57	2.6

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Toronto civil time

7 25 a.m.

10 50 p.m.

4 25 p.m. 9 43 p.m. Greenwich " 0 43 p.m. 4 08 a.m. (of next day.)

Stations.	18th	Nove	mber.	19th	Nove	nber.	20th	Nover	nber.	21st	Nove	nber.	22nd	Nove	mber.
Glace Bay, N.S.	9 36			3 0			o 24	°	0	° 39	0	· .	33	°	1 °
Sydney, ,,	37	41	41	29	2 5	21	26	24	26	35	34	35	37	25	25
Guyshorough, "	34			24			16			34		١.	31		
Halifax, ,,	42	47	38	24	21	19	19	33	33	40	41	36	29	22	19
Charl'town, PEI.	39	43	32	20	18	18	20	27	28	32	34	35	21	22	23
Chatham, N.B.	39	42	24	12	15	17	15	25	25	30	32	28	15	19	15
Bathurst, ,	36	•		13			18			29					
Father Point, Q.				:											!
Quebec, "	34	25	16	13	20	20	25	29	25	25	30	11	11	11	10
Montreal, ,,	3 8	26	19	18	26	27	29	27	27	25	29	16	12	15	14
Cornwall, Ont.	37	,		22			31			26			2	 •	
Ottawa, "	33	27	18	22	29	25	27	30	28	25	28	18	8.	18	10
Brockville, ,,	34	27	20	24	30	28	30	29	30	26	30	20	4	17	16
Kingston, ,,	35	33	23	28	32	29	32	3 5	30	29	31	23	13	13	23
Peterborough, ,,	34			2 6			26			28					
Toronto, ,,	36	32	28	29	31	25	32	33	29	28	31	29	29	33	34
Port Dover, "	37	34	30	29	35	29	28	29	25	27	29	26	29	37	. 39
Port Stanley, ,,	36	35	26	29	32	3 2	288	29	25	26	29	26	37	3 9	41
Windsor, ,,	38			25		,	27			23			36		
Granton, ,,	32			24			25			22			24		
Stratford, ,,	324			26			26			24					
Goderich, ,,	33			29		,	27			30			31		
Kincardine, ,,	33	30	30	29	30		27	31	31	32	32	28	30	31	33
Saugeen, ,,	31	27	30	27	28	25	25	31	29	31	31	23	24	29	31
Stayner, ,.	28	26		25	21		26	28		28	27				
Parry Sound, ,,	25	24	24	22	30	30	26	30	30	25	22	13	14	23	26
Little Current	21			25			26			22	. }	.	18	.]	
Fort Garry, Man.	18	4	—1 0	7	13	11	15	12	2	6	15	15	18	24	15

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich " 7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m. 10 50 p.m.

The Height of the Barometer=27 inches + the numbers in the Table.

Stations.	23rd	Nover	nber.	24th	Nover	nber.	25th	Nover	nber.	26th	Nover	nber.	27th	Noven	aber.
Glace Bay, N.S.	3·13			2·11			2.60	•	•	2.89			3.52		•
S y dney, "	3~14	3.13	2.93	2·1 8	2.28	2.41	2.60	2·72	2.83	2.91	3.12	3.24	3.23	3.57	3·47
Guysborough, "	3·1 5			2·10		. •	2.60			2.91	•		3.2	٠.	•
Halifax, "	3.25	2.98	2.53	2 09	2.31	2.44	2.61	2.74	2.81	2.95	3.15	3.32	3.57	3.57	3.23
Charl'town, PEI.	3.14	3 06	2.60	2.02	2·21	2.35	2.55	2.71	2.83	2.97	3.17	3.32	3.57	3.50	3.46
Chatham, N.B.	3 · 25	3.00	2.51	1.87	2.09	2.24	2.48	2.67	2.81	2.98	3.18	3.36	3.23	3.38	3.35
Bathurst, ,,	3.14			1.80			2.50			3.01			3.20		
Father Point, Q.							.								
Quebec, ,,	3.03	2.58		1.96	2.14	2.57	2.59	2.76	2.88	3 09	3.28	3.37	3.34	3.29	3.31
Montreal, ,,	2.72	2.21	2-02	2.06	2· 2 9	2.48	2.69	2.84	2.97	3.12	3.29	3.33	3.25	3.38	3.36
Cornwall, Ont.	2.51			2.02			2.71			3.12	١.	١.	3.50		
Ottawa, ,,	2.48	2.02	2.02	2.03	2.53	2.51	2.74	2.87	2.97	3.53	3.25	3.26	3.19	3.25	3.36
Breckville, "	2.55	2.15	2.16	2.28	2.49	2.65	2.88	2.98	3.10	3.26	3.32	3.31	3.31	3.37	3.45
Kingston, "	2.36	2.08	2.09	2.23	2.50	2.63	2.84	3.04	3 06	3.30	3.26	3.25	3.24	3.35	3.40
Peterborough, ,.	2.22	١.	1	2.20	ļ.		2.81			3.02			3 · 20		
Toronto, "	2.15	2.02	2.13	2.33	2.57	2.68	2.87	2.95	3.00	3.10	3.16	3.09	3.12	3.31	3.42
Port Dover, ,	2.09	2.10	2.28	2.47	2.63	2.72	2.87	2.96	3.02	3.10	3.14	3.07	3.18	3.33	3.43
Port Stanley, "	2.07	2.15	2.34	2.51	2.66	2.75	2.89	2.98	3.04	3.11	3.11	3.07	3.17	3.34	3.42
Windsor, "	2.08			2.48		.	3.03		.	3.15			3.23		.
Granton, "	2.05			2.47			2.91			3.11	1.		3.15		
Stratford, ,,	2.09			2.44	.		2.91			3.11	.		3.13		
Goderich, ,,	1.92	.		2.45			2.92	.		3.10		١.	3.16		١.
Kincardine, ,,	1.92	1.98	2.13	2.35	2.58	2.72	2.89	2.95	2.95	3.05	2.99	2.94	3.09	3.33	3.44
Saugeen, ,,	1.97	1.95	2.19	2.40	2.57	2.75	2.87	2.96	2.99	3.11	3.07	3.01	3.11	3.32	3 44
Stayner, "	2.07	1.97		2.27	2.53	.	2.83	2.92		3.04	3 06		3.08	3.30	
Parry Sound, "	2.08	1.86	1.99	2.25	2.53	2.71	2.90	2.95	3.01	3.09	3.06	2.98	3.02	3.30	3 · 42
Little Current,,	2.03			2.33			2.33			3.05	.		2.99	.	
Fort Garry, Man	2.76	2.96	3.14	3.28	3.30	3.28	3.16	3.03	2.94	2.68	2.68	2.89	3.16	3.28	3.36

1874.

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich " 7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m. 10 50 p.m.

Stations.	23rd	Noven	aber.	24th :	Noven	aber.	25 th	Noven	aber.	26th	Noven	aber.	27th]	Noven	aber.
Glace Bay, N.S.	29	°.	,	° 48	°	•	39	°	•	35	°	0	33	.	•
Sydney, "	28	28	32	47	40	40	39	36	32	32	33	32	32	32	36
Guysborough, ,,	22			47			36			32	.		30	.	
Halifax, ,,	18	32	38	48	41	39	39	36	34	33	30	25	23	34	38
Charl'town, PEI	22	26	31	41	37	36	35	35	32	28	28	26	24	36	37
Chatham N.B.	5	21	29	38	36	33	30	30	25	18	26	14	6	32	36
Bathurst, ,,	13			37			29			22			14		
Father Point, Q.		$ \cdot $.		
Quebec, ,,	15	15		22	29	28	25	25	21	20	20	17	22	32	34
Montreal, ,,	2 3	30	23	24	28	24	22	22	19	15	19	17	32	37	36
Cornwall, Ont.	28			31			27			13			35		
Ottawa, "	17	27	27	30	25	23	19	20	10	7	24	24	33	41	38
Brockville, "	27	41	38	31	26	24	19	21	15	14	29	30	34	42	40
Kingston, ,,	3 6	45	38	32	27	25	21	23	19	24	33	37	40	45	41
Peterborough, ,,	35			27			15			24			36		
Toronto, "	40	42	34	27	27	26	21	26	27	29	33	34	40	42	36
Port Dover, "	48	41	31	24	27	25	25	27	26	26	34	39	42	43	34
Port Stanley, "	51	38	29	24	27	24	25	27	27	27	35	39	43	42	32
Windsor, ,,	46			23			20			2:)			39		
Granton, ,,	44	.		22			21			23			37		
Stratford, ,,	39			23			20		١.	24	. '		37		
Goderich, "	50			26	 •		27			31			39		
Kincardine, ,,	42	36	34	28	25	26	26	25	30	30	33	36	37	33	30
Saugeen, ,,	36	35	31	25	24	23	21	25	28	27	30	34	34	31	31
Stayner, ,,	34	36		26	24		23	24		26	30		35	34	١.
Parry Sound, "	33	38	32	19	21	17	10	18	15	17	31	32	37	32	28
Little Current ,,	25			18			7			15			32		1.
Fort Garry, Man.	14	9	3	-11	_3	-2	1	3	_11	1	2	-6	_9	1	-12

Table I.—Barometer at 32° Faht, and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows

Toronto civil time Greenwich ,,

7 25 a.m 0 43 p.m.

4 25 p.m. 9 43 p.m. 10 50 p.m.

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	28th	Nove	nber.	29th	Nove	mber,	30th	Nove	mber.	1st	Decen	ber.	2nd	Docen	nber,
Glace Bay, N.S.	3.39			3 24			2.78			3 · 47			3.35		
Sydney, ,,	3.43	3.39	3.39	3.28	2.93	2.71	2 81	3.10	3.21	3.20	3.59	3.56	3.40	3.19	3.09
Guyshorough, ,,	3.42			3.19			2.84			3.53			3.33		١,
Halifax, ,,	3 · 45	3.38	3.33	3.08	2 68	2.21	2.89	3.08	3.31	3.55	3.57	3.20	3.28	3.08	3.12
Charl'town, PEI.	3.41	3.38	3.33	3.09	2.62	2.46	2.87	3.12	3.31	3.58	3.63	3.54	3.36	3.12	3.11
Chatham, N.B.	3.36	3.33	3 · 26	2.30	2 · 30	2.50	2.83	3.11	3.34	3.60	3.58	3.51	3 28	3 11	3.09
Bathurst, ,,	3.42			1 .			2.82			3.60			3.27		
Father Point, Q.															
Quebec, ,,	3 · 36	3.32	3.05	2.55	2.63	2.69	2.99	3.31	3.48	3 · 62	3.40	3.27	3.17	3 · 12	2.98
Montreal, ,,	3-41	3.28	2.98	2.76	2.72	2.81	3.16	3.40	3.54	3.55	3.26	3.14	3.16	3.10	2.85
Cornwall, Ont.	3.40			2.78			3.19		.	3.43			3.12		
Ottawa, "	3.46	8.27	3.04	2.84	2.70	2.84	3 21	3.41	3.47	3.43	3.16	3.08	3.18	3.06	2.73
Brockville, "	3.52	3.34	3.16	2.98	2.86	2.98	3.34	3.51	3.60	3.53	3.24	3.10	3 24	3.13	2.98
Kingston, ,.	3.42	3.27	3.02	2.94	2.84	3 02	3.30	3.44	3.23	3.45	3 14	3.21	3.20	3.07	2.86
Peterborough, ,,	3.42														
Toronto, ",	3.44	3.23	3.07	2.95	2.93	8.10	3.30	3.41	3.47	3.25	3.05	3.11	3.18	2.96	2.77
Port Dover, ,,	3.40	3.19	3.06	3.02	3.00	3.13	3.31	3.46	3.48	3.25	3.08	3.11	3 16	2.97	2.81
Port Stanley, ,,	3.42	3·2 3	3.11	3.05	3.02	3.23	3.36	3.45	3.44	3.53	3.00	3.12	3.17	2.95	2.82
Windsor, ,,	3.20	i .		3.16			3.46		! .	3.22		١.	3.16		
Granton, "	3.44			3.02			3.33			3.22	.		3.18		
Stratford, ,,	3.45						3.30			3 24	.		3.18		
Goderich, "	3.46			2.98] .	3 · 32	١.		3.17			3.13		
Kincardine, ,,	3.45] .	3.08		2.97	3.09	3.29	3.33	3.34	3.14	3.63	3.05	3.08	2.78	2.63
Saugeen, ,,	3.43	3.28	3.09	2.89	2.97	3.17	3.36	3.42	3.36	3.14	 	3.02	3.07	2.75	2.59
Stayner, ,,	3.39	3.24					3.24	3.36		3:18	2.98		3.11	2.82	.
Parry Sound, ,,	3.45	3.32	3.11	2.84	2.90	3.09	3.32	3.41	3.36	3:20	$\frac{1}{2} \cdot 96$	2.99	3.08	2.83	2.61
Little Current,,	3.46			2.88			3.31	1.		3.04		· ·	3.04	.	
Fort Garry, Man	3.52	3.43	3.47	3.52	3.49	3.44	3.32	2.90	2.70	2.87	2.93	2.78	2.62	2.95	3.24

TABLE II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich ,, 7 25 a.m. 43 p.m. 4 25 p.m. 43 p.m. 10 50 p.m. 4 08 a.m. (of next day.)

Stations.	28th	Noven	aber.	29th	Nover	nber,	30th	Nover	nber.	1st l	Decem	ber,	2nd	Decem	ber.
Glace Bay, N.S.	39	٥	•	43	9	0	43	9	0	ρ 26	0	ρ.	32		
Sydney, ,,	39	37	29	38	51	54	44	32	32	27	24	23	28	33	34
Guysborough, ,,	37			39			40			12	.		25		
Halifax, ,,	42	44	33	47	55	53	33	31	26	17	21	24	25	38	34
Charl'town, PEI	38	39	32	40	52	50	31	29	20	16	17	23	27	37	31
Chatham, N.B.	33	37	31	38	53	34	25	20	12	6	14	13	19	25	22
Bathurst, ,,	33						26			10			16		
Father Point, Q.														.	
Quebec, ,,	33	31	26	24	20	18	10	6	0	-2	10	14	15	22	24
Montreal, ,,	35	31	28	26	24	20	3	5	1	3	18	24	23	32	34
Cornwall, Ont.	34			25			3			5			30		
Ottawa, ,,	29	27	24	24	25	14	2	5	-2	1	14	16	20	32	34
Brockville, ,,	31	27	25	22	25	16	0	9	- 6	17	21	25	28	35	37
Kingston, ,,	34	28	25	24	24	14	-1	11	16	22	27	33	30	38	42
Peterhorough, ,,	30		!												_
Toronto, ,,	30	29	26	25	23	12	7	16	10	22	30	28	32	36	42
Port Dover, ,,	30	28	25	24	20	11	8	14	12	23	31	35	28	40	4 3
Port Stanley, ,,	29	26	27	24	19	12	7	16	17	25	29	29	26	42	44
Windsor, ,,	25			17			12			20			25		
Granton, ,,	26			21			10			15			25		
Stratford ,,	27						11			15			27	.	
Goderich, "	28			24			18			19			30		١.
Kincardine, "	30		27		40	19	12	32	17	19	28	32	33	41	46
Saugeen, "	29	26	25	26	17	16	7	17	15	15	27	32	31	38	46
Stayner, "	29	27						7		15	26		30	38	
Parry Sound, "	25	25	23	27	16	3	_8	10	13	14	27	32	32	32	43
Little Current ,,	23			1 18			-6			21			30		
Fort Garry, Man.	-24	8	-25	_20	-8	_2 ₃	-30	7	15	14	15	22	24	14	_3

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

10 50 p.m.

4 25 p.m. 9 43 p.m. 4 08 a.m. (of next day.) Greenwich ,, 0 43 p.m.

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	3rd	Decen	aber.	4th	Decen	aber.	5th	Decen	ber.	6th	Decen	aber.	7th	Decem	iber.
Glace Bay, N.S.	3.08			2.91			3.33			3.11	,		3.02		
Sydney, "	3·10	2·91	2 · 82	2.94	3.14	3·27	3.35	3·29	3.19	3.12	3.10	3.07	3.04	2.74	2.60
Guysborough, "	3.07			2.94			3·35			3.12			2.99		
Halifax, "	3.03	2.83	2·80	2.91	3·16	3.31	3.35	3·28	3 19	3.09	3.07	3.05	2.85	2.61	2.59
Charl'town, PEI.	3.04	2.72	2.78	3.05	3.29	3.38	3.44	3.33	$3 \cdot 22$	3.12	3.09	3.02	2.93	2.70	2.69
Chatham, N.B.	2 91	2.66	2.77	3.17	3·41	3.48	3.48	3.30	3·1 9	3.14	3.06	3.01	2.90	2.75	2.73
Bathurst, ,,	2.87			3.21			3.49	•				•	2.92		١.
Father Point, Q.															
Quebec, ,,	2.63	2.74	3 01	3.37	3.55	3.28	3.43	3· 2 1	3· 2 0	3.12	2.96	2.88	2.82	2.81	2.82
Montreal, ,,	2.63	2.87	3.18	3.48	3.26	3.54	3.41	3.21	3.19	3.08	2.89	2.86	2.83	2.80	2 · 85
Cornwall, Ont.	2 60			3.21			3.36			3.00			2.75	•	
Ottawa, "	2.59	2.97	3.27	3.21	3.28	3.45	3.38	3·1 8	3.17	3.04	2.85	2.83	2.82	2.82	2.95
Brockville, "	2.76	3.05	3.25	3.62	3.63	3.62	3.43	3.27	3.28	3.12	2.94	2.96	2.93	2.95	3.02
Kingston, ,,	2.72	2.99	3· 2 7	3.26	3.57	3.49	3.32	3.16	3.22	3.04	2.89	2.88	2.84	2.87	3.00
Peterborough, ,,										.					
Toronto, "	2.78	3.03	3.30	3.26	3.20	3.41	3.25	3.22	3.17	3.00	2.85	2.84	2.83	2.90	3.04
Port Dover, "	2.80	3.03	3.25	3.52	3.47	3.40	3.23	3.24	3.18	3.01	2.87	2.87	2.85	2.91	3.04
Port Stanley, "	2.83	3.06	3.28	3.20	3.46	3.36	3.26	3.24	3.18	3.02	2.88	2.88	2.86	2.93	3.08
Windsor, "	2.93			3.24			3.29			3 06	.	.	2.94		.
Granton, "	2.83			3.52			3.23		.	2.99			2.85		١.
Stratford, "	2.84			3.24			3.24			.	.	.	2.87		
Goderich, "	2.90			3.56			3.22			2.94			2.90	•	
Kincardine, "	2.83	3.14	3.39	3.24	3.42	3.29	3.16	3.19	3.12		2.80	2.81	2.85	3.02	3.11
Saugeen, ,,	2.82	3.16	3.36	3.52	3.40	3.31	3.15	3.16	3.11	2.94	2.79	2.79	2.83	3.01	3.11
Stayner, ,,	2.76	3.11		3.53	3.43		3.17	3.17					2.80	2.98	.
Parry Sound, ,,	2.76	3.17	3.41	3.28	3.47	3.37	3.12	3.12	3.10	2 93	2.79	2.77	2.83	3.04	3.15
Little Current,,	2.92			3.24			3.07		} .	2.87			3.00		
Fort Garry, Ma	n 3·31	3.66	2.96	2.93	3.01	3.07	2.88	2.96	3:04	3.13	3.23	3.28	3.22	2.80	2.56

1874.

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich "

7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m.

10 50 p.m. 4 08 a.m. (of nextday.)

Stations. Glace Bay, N.S.		Decen		4.5	_			_			- .			_	_
Glace Bay, N.S.			iber.	4th.	Decen	iber.	5th	Decem	iber.	6th	Deven	iber.	7th	Decen	iber.
	o 34		•	46	•		34			32			37	°	•
Sydney, ,,	34	43	47	46	33	31	32	33	32	31	32	31	35	50	52
Guysborough, ,,	32			44			27			26			35		
Halifax, ,,	34	45	47	43	31	29	27	27	27	31	32	35	43	49	39
Charl'town, PEI.	34	40	42	32	28	26	27	28	28	27	28	31	35	38	36
Chatham, N.B.	29	40	39	28	21	12	7	20	19	15	26	26	28	30	23
Bathurst, "	22			23			7						27		
Father Point, Q.															
Quebec, ,,	30	34	26	18	26	15	12	18	20	20	25	26	30	31	30
Montreal, ,,	39	36	23	9	13	12	9	16	18	25	25	27	32	33	31
Cornwall, Ont.	44			9			4			28			32		
Ottawa, ,,	41	29	16	1	13	5	5	18	19	21	27	27	27	29	16
Brockville, ,,	43	32	23	5	14	15	15	31	33	33	36	34	33	35	20
Kingston, "	45	39	19	8	18	15	23	35	35	36	37	35	36	37	18
Peterborough, ,,								,							
Toronto, "	43	33	22	13	23	27	26	34	34	32	35	35	32	28	19
Port Dover, "	46	40	26	17	29	22	35	34	32	32	37	32	33	33	21
Port Stanley, ,,	44	36	27	18	2 8	28	34	35	33	34	36	36	32	32	21
Windsor, ,,	43			24	,		32			35			34		
Granton, "	40			13			29	,		31			30		
Stratford, "	40			14			29	,			. ,		31		
Goderich, "	36			17	•		34			36			33		
Kincardine, "	39	28	21	19	31	27	33	37	35		36	35	34	28	20
Saugeen, "	40	24	18	17	27	22	29	35	37	33	36	34	35	18	15
Stayner, ,,	39	27		9	21		24	36					29	21	
Parry Sound, "	36	18	9	5	23	20	25	36	36	33	35,	33*	27	13	7
Little Current ,,	21			10			32			33			15		•
Fort Garry, Man.	-13	12	20	22	29	13	25	31	30	19	19	23	22	27	2 6

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Green wich "

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	8th	Decei	mber.	9th	Dece	mber.	10th	Dece	mber,	11th	Dece	mber.	12th	Dece	mber.
Glace Bay, N.S.	2.62	1		2.64			2.97		1.	3.25		1.	2.80	Ī.	.
Sydney, "	2.62	2.40	2.26	2.71	3.05	3.13	2.98	3.15	3.24	3 29	3.01	2.86	2.87	2.98	3.06
Guysborough, "	2.56			2.84			2.88			3.23	.		2.95		
Halifax, "	2.54	2.28	2.55	2.91	3.01	2.98	3.03	3.14	3.26	3.21	2.91	2.78	2.96	3.07	3.15
Charl'town, PEI.	2.67	2 · 45	2.57	2.89	3.05	2.89	3.02	3.50	3.31	3.29	2.99	2.75	2.91	3.07	3.15
Chatham, N.B.	2.75	2.69	2.78	2.92	2.94	2.87	2.98	3.21	3.33	3.28	2.94	2.83	3.03	3.11	3.17
Bathurst, ,,	2.87			2.94			2.99			3.22			3.02		
Father Point, Q.													 •		
Quebec, ,,	2.94	3.00	3.03	2.97	2.79	2.82	3.18	3.29	3 23	2.95	2.89	3.05	3.17	3.25	3.26
Montreal, ,,	2.99	3.07	3.08	2.82	2.72	2.94	3.29	3.24	3.12	2.91	3.01	3 17	3.22	3.28	3.53
Cornwall, Ont.	3.03			2.79			3 · 25			2.90			3.24		
Ottawa, "	3.04	3.08	3.03	2.77	2.67	3.06	3.27	3.17	3.06	2.79	3.07	3.17	3.26	3· 2 8	3.24
Brockville, "	3.18	3 · 21	3.16	2.89	2.86	3.05	3 37	3.27	3.23	3.04	3.14	3 29	3.30	3.33	3.29
Kingston, ,,	3·12	3· 15	3.05	2.79	2.86	3.14	3.31	3.21	3.10	3.01	3.12	3.25	3.28	3.27	3.23
Peterborough, "	٠.								۱.						
Toronto, "	3.17	3.09	2.93	2.69	2.93	3.13	3.25	3.19	3.06	3.03	3.17	3.21	3.25	3.24	3.23
Port Dover, "	3.18	3.08	2.93	2.72	2.99	3.15	3.30	3.20	3.10	3.10	3 ·20	3.24	3.29	3.29	3.23
Port Stanley, "	3.18	3.09	2 · 93	2.77	3.01	3.17	3.28	3.19	3.14	3.13	3.20	3.24	3.31	3.28	3.24
Windsor, "	3 2 8			2.83			3.32			3 · 20		.	3.40		
Granton, "	3.20			2.72			3.38			3.10			3 ·29		
Stratford, ,.	3·20			2.73			3.28			3.09			3.28		
Goderich, ,,	3 · 20			2·69			3.25			3.11			3·2 9		
Kincardine, ,,	3·16	2·97	2.81	2.65	2.94	3·14	3.21	3.07	3.03	3.08	3.19	3.20	3.18	3· 2 3	3.17
Saugeen, ,,	3·18	2.96	2.78	2.63	2.96	3·10	3·18	3.08	2·97	3.04	3.16	3.18	3.19	3·19	3.15
Stayner, ,,	3.14	2.97	٠. ا	2.61	2.95		3.19	3·12		3.01	3.15		3 ·15	3·19	
Parry Sound, ,,	3.21	3.02	2.83	2.57	2·91	3·10	3.18	3.10	2·91	3.03	3.18	3.17	3.24	3· 22	3· 22
Little Current ,,	3 · 21	.		2.57	٠.		3·19			3.11			8·23		
Fort Garry, Man.	2.51	2.86	3.02	3.26	3.32	3.25	3.06	3.29	3.46	3.54	3.42	3.35	3· 23	3·21	3.32
<u> </u>	i	!		!	<u>. — i</u>		<u> </u>					<u> </u>	<u> </u>		

1874.

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

Stations.	8th I)ece in	ber.	9th I	Décem	ber.	10th 1	Decen	iber.	11th	Decen	ber.	12th]	Decem	ber.
Glace Bay, N.S.	40	<u> </u>	•	30	•	•	43	0	Q .	33	.		29	.	9
Sydney, ,,	42	40	44	31	30	28	42	31	29	27	36	36	30	23	17
Guysborough, ,,	39			26	. !	,	38			22			24	.	
Halifax, "	36	38	33	29	29	37	34	33	25	21	31	37	22	17	10
Charl'town, PEI.	34	33	2 8	24	28	33	33	29	19	17	26	34	19	11	7
Chatham, N.B.	28	30	22	6	18	20	8	16	-3	-6	16	13	1	-1	8
Bathurst, ,,	29	.		16			18	•		. 6			4		
Father Point, Q.															
Quebec, ,,	19	15	10	5	15	19	11	12	12	22	21	16	-4	-1	-5
Montreal, .,	16	10	5	21	27	29	9	18	20	28	20	8	3	4	8
Cornwall, Ont.	12			23			13			30			7		
Ottawa, ,,	5	5	4	13	29	18	5	16	14	27	16	5	-2	6	4
Brockville, ,,	9	13	12	23	32	27	14	28	28	27	18	6	10	12	14
Kingston, ,,	11	14	20	30	34	23	20	30	34	19	23	13	14	20	21
Peterborough, "													.		
Toronto, ,,	15	24	30	33	31	25	25	28	29	28	22	21	15	22	20
Port Dover, "	16	27	30	35	33	30	23	30	31	28	25	18	14	19	20
Port Stanley, ,,	20	27	32	35	34	31	22	31	29	28	25	19	12	22	2:
Windsor, ,,	14			36			26			26			9		
Granton, ,,	15		1 :	30		١.	17			23			15		
Stratford, "	15			30			21	! •		24		1	17		 .
Goderich, "	18			35			27			25			20		١.
Kincardine, ,,	17	27	28	37	31	27	27	31	28	27	22	20	19	23	2
Saugeen, ,,	12	21	27	33	29	27	27	27	27	25	15	18	19	21	1
Stayner, "	10	20		31.	26	. •	25	21		23	18		8	20	
Parry Sound, ,,	-1	12	21	32	23	16	15	22	30	15	10	10	0	12	
Little Current ,,	-1			30	 		17		!	10	 •		1		١.
Fort Garry, Man	29	23	13	6	8	8	10	1 2	-11	-24	-8	-11	-4	1	_,

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

Greenwich

0 43 p.m.

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The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.	13th	Decen	nber.	14th	Decer	nber.	15th	Decer	nber.	16th	Decer	nber.	17th	Decen	nber.
Glace Bay, N.S.	3.14	(.		3.00		,	2.24			2.91	,	,	2.80		
Sydney, ,,	3.19	3 · 27	3.31	3.11	2.55	2.28	2.56	2.74	2.85	2.95	3.03	3.01	2.84	2.59	2.45
Guysborough, ,,	3.23			2.99			2.65			3.02			2.86		.
Halifax, "	3.30	3.27	3.24	2.83	2.42	2.51	2.76	2.91	3.02	3.16	3.17	3.11	2.97	2.68	2.50
Charl'town, PEI.	3.24	3.29	3.29	2.98	2.55	2.61	2.76	2.90	3.01	3.18	3.23	3.16	3.01	2.71	2.51
Chatham, N.B.	3.29	3.28	3 · 27	3.05	2.79	2.84	2.89	3.04	3.18	3.30	3· 2 8	3.21	3.03	2.69	2.48
Bathurst, "				3.01	١.		2.92			3.34	! ·		3.01		.
Father Point, Q.							١.	١.							
Quebec, "	3.27	3.25	3.16	2.98	3.16	3.23	3 31	3.40	3.20	3.48	3.29	3.15	2.84	2.62	2 58
Montreal, "	3.29	3.19	3.03	2.98	3.25	3.42	3.55	3.20	3.57	3.42	3.23	3.02	2.74	2.60	2.71
Cornwall, Ont.	3.25			3.01			3.57			3.36		· ·	2.71		
Ottawa, "	3.25	3.14	2.97	3.07	3.24	3.48	3.26	3.57	3 60	3.28	3.03	2.94	2.59	2.68	2.88
Brockville, ,,	3.35	3.19	3.07	3.12	3.43	3.55	3.72	3.67	3 62	3.48	3.19	3.05	2.80	2.81	3.00
Kingston, ,,	3.25	3.10	2.93	3.06	3.42	3.55	3.66	3.60	3.49	3.36	3.10	2.94	2.70	2.74	3.00
Peterborough, ,,						.									
Toronto, ,,	3.16	2.94	2.83	3.13	3.43	3.54	3.59	3.20	3.35	3.25	2.95	2.77	2.75	2.93	3.09
Port Dover, ,,	3.14	2.90	2.77	3.12	3.43	3.28	3.28	3.48	3.35	3.24	2.94	2.79	2.81	3.00	3.15
Port Stanley, "	3.12	2.90	2.81	3.14	3.41	3.56	3.55	3.45	3.37	3.55	2.93	2.83	2.87	3.05	3.50
Windsor, ,,	3.12	١.		3.21	·		3.59			3.16		.	2.90		
Granton, ,,	3.09			3.18			3.51			3.22			2.84		
Stratford, ,,				3.19			3.57			3.23	.		2.82		
Goderich, ,,	3.11			3.30			3.54			3.18	1.		2.86		
Kincardine, "	3.04	2.91	2.89	3.27	3.44	3.24	3.50	3.33	3.26	3.12	2.81	2.67	2.81	2.93	3.18
Saugeen, .,	3.07	2.95	2.92	3.23	3.47	3.23	3.50	3.31	3.15	3.12	2.88	2.65	2.77	3.02	3.18
Stayner, ,,				3.19	3.40		3.55	3.37	.	3.17	2.86		2.69	3.01	•
Parry Sound, "	3.13	3.00	3.00	3.30	3.20	3.62	3.53	3.39	3.58	3.19	2.91	2.70	2.68	3.04	3.17
Little Current,,	3.14			3.44			3 44			3.07	.		2.89		
Fort Garry, Man	3.41	3.45	3.43	3.27	3.01	2.90	2.72	2.76	2.88	3.12	3.37	3.50	3.36	2.97	2.76

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. 4 25 p.m. 10 50 p.m. Greenwich , 0 43 p.m. 9 45 p.m. 4 08 a.m. (of next day.)

Stations.	13th	Decem	ber.	14th :	Decem	ber.	15th :	Decem	ber.	16th	Decem	iber.	17th I)ecem	ber.
CL P NC	0	• 1		00 1	0	¦	01	۰ ۱	•	00	۰ ۱	ا	° 1	9	°.
Glace Bay, N.S.	13	.		29			21	:]	•	26		22	30	20	•
Sydney, "	13	15	16	19	44	41	22	19	20	25	27	. 27	29	26	24
Guysborough, ,,	4	•]	.]	8			14	.		18			24		•
Halifax, ,,	10	19	20 7	40 13	26	22 17	7	2	8 18	15	18 22	19 23	20	24	24
Charl'town, PEI.	4	! [: I	- 1		5	8	, ,	20			18	22	22
Chatham, N.B.	-17	-2	6	1	9	1	<u>-9</u>	3	5	-6	4	4	3	15	16
Bathurst, ,,		•	•	2	.	•	-5	•	•	-2	.	•	6	.]	•
Father Point, Q.			•			•		•	•	.	•	٠		.	•
Quebec, ,,	— 5	10	1	6	3	-11	-18	-4	10	-6	6	11	20	20	21
Montreal, ,,	7	7	8	6	0	–8	-14	-7	7	5	11	10	16	21	19
Cornwall, Ont.	1		٠	5		• ,	19	٠		7	•		17	.	•
Ottawa, ,,	5	10	10	7	0	10	- 16	-8	10	-1	11	13	15	26	10
Brockville, "	11	15	11	9	-1	6	-21	-3	1	8	24	20	32	27	11
Kingston, ,,	13	15	13	11	2	-7	-14	0	18	23	29	32	38	33	12
Peterborough, ,,				' ·	•	·	·							.	•
Toronto, "	23	27	22	16	4	-1	4	13	25	24	35	37	36	27	18
Port Dover, ,,	24	29	31	20	11	1	4	23	27	30	37	37	37	28	21
Port Stanley, "	24	37	33	22	12	8	6	25	30	31	36	39	36	27	22
Windsor, "	29			20	·		10			29		1 .	36		
Granton, ,,	20		•	14			4	į .		22			33		
Stratford, ,,	.	.	.	15	•		5		·	23			33		
Goderich, "	23	.	.	13			10			24			34		
Kincardine, "	28	25	24	12	11	8	10	20	25	30	35	37	31	26	22
Saugeen, ,,	21	23	23	18	6	5	7	17	18	23	32	37	34	19	17
Stayner, ,,				7	8	Ì .	2	12		18	29		35	18	
Parry Sound, "	13	19	14	8	-4	-19	₹ —9	9	15	18	31	31	33	9	2
Little Current ,,	12	1.		-12			5	.		30		.	13		
Fort Garry, Mar	8	-6	-14	-5	15	16	21	25	21	5	-1	-14	-7	16	28
5-11		· <u>·</u>	<u>'</u>	1,		'	61	<u>'</u>			<u>'</u>	<u> </u>	<u>, </u>	1	'

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

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7 25 a.m.

4 25 p.m.

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Greenwich "

0 43 p.m.

9 43 p.m.

The Height of the Barometer=27 inches + the numbers in the Table.

Stations.	18th	Dece	nber.	19th	Dece	mber.	20th	Dece	mber.	21st	Decer	nber.	22nd	l Dece	mber
lace Bay, N.S.	2·29			2.50			3.00			2.88			3.09		
Sydney, "	2.31	2.07	2.19	2.50	2.62	2.76	2.98	3.05	3.01	2.91	2.85	2.97	3.10	3.17	3.1
łuysborouch, "	2 ·27			2.56			3.05	.		2.81			3.11		
Halifax, "	2·18	2.29	2.48	2.59	2.68	2.90	3.07	2.99	2.94	2.79	2.81	3.01	3.15		2.9
Charl'town, PEI.	2.27	2.24	2·41	2.57	2.68	2.85	3.05	3.04	3.04	2.99	3.02	3.09	3.17	3.13	3.0
Chatham, N.B.	2.31	2.35	2.44	2.24	2.69	2.93	3.04	3.03	3,13	3.15	3.16	3.16	3.09	3.02	2.8
Bathurst, ,,	2.33			2.28						3.22		.	3.12		.
ather Point, Q.														١.	١.
daepec, "	2.68	2.68	2 63	2.67	2.91	3.01	3.05	3.02	3.17	3.23	3.53	3.14	3-01	2.81	2.76
dontreal, ,,	2.91	2.74	2.59	2.76	3.03	3.07	3.03	3·10	3.17	3.24	3.19	3.09	2.90	2.74	2.7
Cornwall, Ont.	3.02			2.77			2.95			3.23			2.86		
Ottawa, "	2.99	2.70	2.60	2·7 8	3.06	3.02	3.01	3.09	3.22	3.21	3.14	3.09	2.85	2.69	2.70
Brockville, ,	3·15	2·80	2.74	2.89	3·17	3.16	3.05	3.18	3.20	3 · 31	3.26	3.16	2.91	2.79	2 8
Kingston, ,,	3.11	2.74	2.73	2.86	3.13	3.08	2.95	3.04	3.12	3 27	3.21	3.03	2.81	2.72	2.70
eterborough, ,,] . :							
Coronto, ,,	3.08	2.75	2·76	2.92	3.06	3.03	2.93	3.03	3.15	3·17	3.03	2.91	2.70	2.68	2.8
Port Dover, ,,	3·17	2·80	2·85	3.00	3·11	3.03	2.91	2.99	3·11	3 ·18	3.05	2.90	2.71	2.70	2.8
ort Stanley, "	3.19	2.86	2.89	3.02	3.09	3.03	2.94	3.01	3.14	3·17	3.05	2.92	2.73	2.71	2.87
Vindsor, ,,	3.24			3.21			3.00			3·21			2.74		
franton, ,,	3·17			2.99			2.83			3.16			2.69		
tratford, ,,	3·17			3.01						3·17			2.72		١.
loderich, ,,	3.08			3.02			3·13			3.01			2.66		
Cincardine, ,,	3.02	2.79	2.82	2.95	3.01	2.91	2.96	3.05	3·10	3.09	2.93	2.84	2.62	2.62	2.82
augeen, ,,	3.02	2.68	2.74	2.92	3.02	2 · 97	2.99	3·10	3·10	3.07	2.92	2.79	2.60	2.62	2.77
tayner, ,,	2.98	2.68		2.89	3.03					3·14	2.94		2.67	2.62	١.
Parry Sound, ,,	2.99	2·61	2.66	2·90	3.08	3.01	3.00	3.14	3·17	3·11	2.97	2.86	2.65	2.61	 2·75
ittle Current ,,	2·81		•	2.94			3.17			2.99	.		2 ·58	j .	
ort Garry, Man.	2.86	2.86	2.94	3 ·14	3.47		2.90	2.57	2.44	2.63	2.91	2.88	2.73	2.60	2.57

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Toronto civil time

7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich ,, 0 43 p.m. 9 43 p.m. 4 08 a.m. (of next day.)

Stations.	18th	Decen	ber,	19th	Decem	ber.	20th	Decen	ber.	21st]	Decem	ber.	22nd]	Decem	ber.
Glace Bay, N.S.	25	0	•	0	°		23	°	•	25	°	•	22	•	6
Sydney, ,,	25	33	31	19	19	20	22	23	25	25	20	19	22	17	18
Guysborough, .,	21			10			10			23	.	.	19	7.	,
Halifax, ,,	33 1	23	17	17	27	16	13	31	28	22	18	15	11	22	32
Charl town, PEI.	25	25	15	9	16	14	12	21	19	18	17	15	11	25	27
Chatham, N.B.	18	15	8	-1	15	5	5	16	8	-2	4	-7	3	19	28
Bathurst, ,,	20			2	.			.		5			-3	-	•
Father Point, Q.				.											
Quebec, ,,	7	6	7	8	16	16	15	16	5	0	6	1	0	21	25
Montreal, ,,	2	10	16	21	18	15	16	13	0	-4	1	1	4	18	25
Cornwall, Ont.	3			28			19			-13			5	·.	
Ottawa, ,,	0	14	17	25	20	14	16	12	-2	- 9	4	2	8	17	27
Brockville, "	0	26	29	30	23	15	21	13	11	_5	. 8	11	14	32	33
Kingston, ,,	4	29	31	32	27	25	24	15	9	-1	14	28	33	37	36
Peterborough, "] .			.		ļ : .									
Toronto, "	21	28	33	31	35	28	26	23	13	15	31	32	34	35	34
Port Dover, "	18	31	32	29	36	31	31	30	22	24	32	33	35	35	34
Port Stapley, "	21	31	31	29	34	34	30	27	22	22	31	33	34	35	33
Windsor, "	22			26			32			14			33		
Granton, ,,	13			29			29			17] .		32	•	
Stratford, ,,	18		1	31						18		١.	31		١.
Goderich, "	24			34	,		29		.	30			31		
Kincardine, ,,	24	34	33	36	36	32	28	35	27	20	28	30	31	35	3 3
Saugeen, ,,	23	30	32	32	34	32	22	18	15	1.3	24	28	29	33	32
Stayner, "	22	29		32	33			۱.	١.	3	24		28	34	
Parry Sound, ,,	6	31	33	24	27	25	16	9	-1	10	22	24	28	33	31.
Little Current ,,	25	١.		24			3			16			30		1
Fort Garry, Man	1 20	26	1 20	8	_2	_10	1 7	1 21	21	21	3	1	-7	12	i '

Table I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

The Height of the Barometer = 27 inches + the numbers in the Tables.

Stations.	23rd	Decer	nber.	24th	Decer	nber.	25th	Decer	nber.	26th	Decer	mber.	27th	Decer	nber.
Glace Bay, N.S.	3.00			3.05			2.31			2.98			2.95		
Sydne y , ,,	3.03	2.68	2.76	2.97	2.69	2.00	2.15	2.24	2.72	2.97	3.10	3.13	3.02	3.03	3-17
Guysborough,,,	2.91			2.97			2.33			3.08			2.99		.
Halifax, "	2.68	2.74	2.75	2.80	2.37	1.90	2.37	2.62	2.81	3.01	3.02	2.94	2.86	2.92	3.06
Charl'town, PEI.	2.90	2.79	2.91	2.96	2.58	2.14	2.41	2.72	2.91	3.11	3.12	3.09	3.02	3.12	3.22
Chatham, N.B.	2.82	2.84	2.90	2.89	2.23	2.33	2.25	2.83	3.01	3.12	3.11	3.04	3.02	3.12	3.22
Bathurst, ,.	2.86			2.91											
Father Point, Q.			١.										[.		
Quebec, ,,	2.85	2.91	2.93	2.72	2.50	2.60	2.97	3.27	3.30	3.24	3.03	2.99	3.02	3.16	3.11
Montreal, ,,	2.87	2.96	2.89	2.62	2.63	2.74	3.17	3.35	3.32	3.14	2.99	2.98	3.11	3.14	2.99
Cornwall, Ont.	2.86	•		2.59			3.25			3.07	١.		3.10		
Ottawa, ,,	2.82	2.94	2.74	2.55	2.65	2.84	3.18	3.37	3.27	3.09	3.00	2.98	3.07	3.10	2.97
Brockville, "	3.02	2 96	2.99	2.74	2.80	2.94	3.37	3.46	3.39	3.14	3.03	3.05	3.26	3.16	3.02
Kingston, ,,	2.98	2.97	2.85	2.68	2.78	2.98	3.33	3.39	3.24	3.06	2.97	3.01	3.16	3.06	2.90
Peterborough, ,,						١.							.] .	
Toronto, "	2.98	2.89	2.78	2.72	2.89	3.13	3.83	3.28	3.09	2.98	2.93	3.02	3.11	2.93	2.77
Port Dover, ,,	3.00	2.89	2.78	2.77	2.98	3.23	3 37	3.28	3.07	3.00	2.94	3.01	3.10	2.92	2.78
Port Stanley, ,,	3.01	2.89	2.80	2 82	3.04	3.26	3.36	3.24	3.08	3.00	2.95	3.03	3.08	2.92	2.79
Windsor, ,,	3.04	.		2.91			3.41	١.		3.03			3.09		١.
Granton, ,,	2.99			2.76			3.37			2.99		.	3.10		.
Stratford, ,,	3:02			2.77		١.	3.38	! ! •		2.91					
Goderich, "	2.98			2.77			3.34			2.97			3.13		
Kincardine, ,,	2·91	2.71	2.67	2.66	2.89	3.11	3.30	3.16	2.95	2.91	2.91	3.03	3.03	2.80	2.68
Saugeen, ,,	2·89	2.71	2.63	2.62	2:91	3.12	3.30	3.18	2.95	2.80	2.91	3.00	3.05	2.86	2.67
Stayner, ,,	2.92	2.77		2.62	2.88		3.38	3.20		2.94	2.92			! ∤30·04	١.
Parry Sound, ,,	2.88	2.78	2.63	2.57	2.80	3.04	3.34	3.26	3.05	2.90	2.89	2.99	3.09	2.90	2.71
	2.82			2·57			3.31	 .		2.83			30.04		
Fort Garry, Man.	2.62	2.92	3.09	3.19	3.13	3.06	2.92	2.91	2.88	2.89	2.76	2.75	2.78	2.85	2.91

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time

7 25 a.m.

4 25 p.m. 9 43 p.m.

Greenwich "

0 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

Stations.	2 3rd	Decer	nber.	24th	Decer	nber.	25th	Decer	nber.	26th	Decer	nber.	27th	Dece	mbe
Glace Bay, N.S.	34	, °		31	°	.	29	:	ı °	 28	9	9	31		°
Sydney, ,,	33	37	36	31	33	33	. 30	29	26	22	16	18	25	28	2
Guysborough, ,,	31			26			29	 .	 •	11			27		١.
Halifax, ,	38	38	31	31	37	34	31	28	21	13	23	29	33	30	2
Charl'town, PEI.	33	36	31	29	34	32	29	26	16	8	14	22	23	20	1
Chatham, N.B.	33	33	28	20	29	29	28	19	10	2	15	12	14	17	
Bathurst, ,,	24			19	١.										١.
Father Point, Q.			.												١.
Quebec, ,,	27	30	29	27	30	27	16	10	6	5	18	17	20	27	2
Montreal, ,,	33	32	27	30	30	28	12	11	10	5	10	13	17	24	2
Cornwall, Ont.	24			34			13			11			17		
Ottawa, "	28	32	32	32	29	27	10	11	4	10	15	14	11	24	2
Brockville, "	33	32	31	32	30	27	12	14	11	18	31	25	10	28	2
Kingston, ,,	34	35	34	34	31	26	21	21	22	31	36	35	23	29	4
Peterborough, ,,				١.											١.
r _{oronto.} ,,	31	34	35	29	29	26	21	27	29	31	37	28	24	37	3
Port Dover, "	32	34	33	29	26	22	19	27	30	34	36	32	23	3 8	4
Port Stanley, "	31	34	34	29	26	22	20	29	32	33	36	27	23	35	4
Windsor, "	29			27			17			32			24		
Granton, "	28			26			16			28			21		
Stratford, ,,	28			26		! ! .	18			28					١.
Goderich, "	31			29			21		.	32			29		
Kincardine, "	32	34	34	39	28	25	24	29	29	31	35	21	27	35	4
Saugeen, ,,	32	31	34	2 6	2 6	23	24	21	26	32	34	22	23	34	3
Stayner,	31	31		28	26		23	22		23	32		.		
Parry Sound,	28	30	30	28	27	22	2	18	21	23	34	30	25	31	3
Little Current,,	30			23			40			33	· .		24		
Fort Garry, Man.	12	1	-9	_ 20	E,	-7	0	-2	1	7	13	6	6	-5	-1

1874

TABLE I.—Barometer at 32° Faht. and reduced to Sea-level, observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

The Height of the Barometer = 27 inches + the numbers in the Table.

Stations.		28th	Decem	ber.	29th	Decem	ber.	30th	Decen	ber.	31s t	Decem	ber.
Glace Bay,	N.S.	3.23		,	2.42	, ,		2.58			2.59	.	
Sydney,	,,	3.26	3.04	2.67	2.45	2.34	2.41	2.63	2.61	2.60	2.65	2.69	2.70
Guysborough,	,,	3.23			2·4 8		•	2.77			2.80		
Halifax,	"	3.08	2.76	2.58	2·3 8	2.31	2.48	2.76	2.63	2.71	2.78	2.81	2.87
Charlottetown, 1	P.E.I.	3.23	2.88	2.61	2.54	2.39	2.60	2.91	2.77	2.83	2.88	2.93	2.92
Chatham,	N.B.	3.16	2.71	2.57	2.50	2.40	2.74	2.90	2.84	2.89	2.95	3.03	3.01
Bathurst,	,,				2.52			2.88			2.98		
Father Point,	Q.	,											
Quebec,	,,	2.83	2.68	2.65	2.58	2.91	3.08	3.07	3.27	3.41	3.21	3.56	3.24
Montreal,	**	2.71	2.69	2.71		3.00	3.18	3.14	3.42	3.62	3.73	3.72	3.62
Cornwall,	Ont	2.67			2.69			3.07			3.81		
Ottawa,	59	2.70	2.70	2.72	2.66	3.04	3.18	3.19	3.45	3.67	3.79	3.80	3.70
Brockville,	,.	2.83	2.81	2.87	2.85	3.15	3.33	3.32	3.56	3.73	3.92	3.86	3.8
Kingston,	,,	2.77	2.77	2.86	2.83	3.13	3.31	3.30	3.48	3.74	3.88	3.85	3.8
Peterborough,	,,												١.
Toronto,	,,	2.74	2.79	2.86	2.30	3.25	3.33	3.36	3.47	3.71	3 .83	3.78	3.7
Port Dover,	23	2.74	2.81	2.92	2.96	3.27	3.39	3.43	3.53	3.66	3.77	3.75	3.7
Port Stanley,	,,	2.77	2.85	2.96	3.02	3.30	3.41	3.48	3.55	3.64	3.75	3.76	3.7
Windsor,	,,	2.85			3 24			3.55			3.85	· '	
Granton,	,,	2.78			3.03			3.44			3.77		١.
Stratford,	••	2.79			3.06			3.45			3.79		۱.
Goderich,	39	2.82			3.14	} .		3.47	} .		3.80	} .	
Kincardine,	,,	2.80	2.79	2.87	3.03	3.29	3.34	3.38	3.21	3.65	3.76	3.72	3.6
Saugeen,	,,	2.78	2.80	2.84	3.04	3.26	3.30	3.35	3.52	3.67	3.76	3.66	3.6
Stayner,	,,	2.79	2.88		2.98	3.24		3.29	3.49		3.77	3.70	
Parry Sound,	,,	2.72	2.78	2.79	2.96	3.21	3.24	3.27	3.57	3.58	3.86	3.74	3.6
Little Current,	"	2.75	· .		3.04	1		3.31	1 .		3.75	· ·	-
Fort Garry,	Man.	3.15	3.21	3 29	3.41	3.54	3.77	3.77	3.79	3.77	3.51	3.12	2:9

Table II.—Temperature of the Air observed at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time Greenwich "

7 25 a.m. 0 43 p.m.

4 25 p.m. 9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

Stations.		28th	Decen	aber.	29th	Decen	aber.	30th	Decer	nber.	31st	Decem	ber.
Glace Bay,	'n.s.	27			36			3			5	°	°
Sydney,	,,	25	29	34	36	34	2 3	5	4	2	5	13	16
Guysborough,	,,	21	•	.	35			0			-10		١.
Halifax,	,,	26	36	42	39	37	2 0	5	8	-1	0	5	8
Charlottetown,	P.E. [.	18	30	34	34	33	14	-7	6	_11	3	4	5
Chatham,	N.B.	12	30	33	29	28	-2	-11	_9	-12	5	3	1
Bathurst,	.,			.	25			_11	١.		-5		
Father Point,	Q	•							١.				
Quebec,	,,	26	33	31	30	8	0	10	-11	19	-18	—9	-11
Montreal,	,,	37	37	36		10	0	0	-8	-14	-17	—6	-2
Cornwall,	Ont.	32			35			9			-14	, .	
Ottawa,	,,	30	37	34	33	12	5	0	-6	-13	20	6	-1
Brockville,	,,	3 9	37	3 5	33	17	7	9	-2	-9	-12	0	4
Kingston,	"	40	38	34	34	19	12	10	5	-8	-10	5	12
Peterborough,	,,	•	ĺ.					٠.					
Toronto,	,,	39	36	3 5	31	16	15	14	17	2	-6	12	12
Port Dover,	,,	41	39	36	32	20	13	12	15	14	8	20	14
Port Stanley,	,,	39	38	34	31	19	12	12	16	15	14	21	16
Windsor,	,,	44			21			14			6		
Granton,	,,	40		į .	25	ļ ,.		11			11		
Stratiord,	,,	3 8			23			10		.	9		
Goderich,	,,	37			20			14			11		1
Kincardine	,,	39	36	33	20	14	12	15	17	9	11	20	17
Saugeen,	,,	35	33	31	18	11	11	15	12	6	7	18	15
Stayner,	,,	40	34]	18	11		12	10		1	13	
Parry Sound,	,,	35	31	31	13	6	2	8	-8	-24	-35	5	7
Little Current,	,,	31			7			0			-8		
Fort Garry,	Man.	-30	23	-30	- 32	-20	27	-31	-15	-26	-15	5	9

1874.

TABLE A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich ,, 0 43 p.m. 9 43 p.m. 4 08 a.m. (of next day.)

0100H 33		- 10	Р.ш.	·			Р.ш.				. ш.	. (01	HOAL	uuy.,	<u>'</u>
Stations.	lst	Janus	ary.	2nd	Janu	ary.	3rd	Janu	ary.	4th	Janus	ry.	5th	Janus	ury.
Sydney, N.S.	C	G	C	c	sw	sw	C	w	św	sw	sw	sw	sw	NE	N
Halifax, ,,	sw	sw	S	S	s	sw	C	w.	sw	sw	sw	sw	sw	NW	NW
Charl'town, PEI.	s	С		S	s	8	sw	sw	S	s	s	S	sw	NW	NW
Chatham, N.B.	C	C	C	C	C	C	sw	s	s	s	sw	s	sw	w	NW
Father Point, Q.	ន	ន	s	C	s	sw	C	sw	sw	sw	sw	w	w	NW	NW
Montréal, ,,	١.				١.										
Ottawa, Ont.	SE	E	SE	NE	N	N	E	E	SE	s	sw	sw	NW	N	NE
Kingston, "	sw	s	S	s	s	s	8	8	8	B	8	w	NW	NE	NE
Toronto, "	sw	sw	s	sw	s	SE	E	ន	sw	sw	sw	NW	N	C	NE
Port Dover, "	ន	s	s	sw	s	s	s	s	ន	s	s	NW	NW	E	NE
Port Stanley, ,,	sw	sw	sw	C	sw	s	SE	SE	SE	s	w	nw	NW	E	NE
Kincardine, ,,	S	S	ន	s	S	ន	s	8	s	s	NW	NW	s	NE	E
Saugeen, ,,	s	ន	8	s	S	SE	S.	8	B	s	NW	w	s	O	C
Little Current,,			•								 •				
Fort Garry, Man.	w	SE	8	8	NE	N	N	NW	NW	sw	s	s	s	SE	ន
Stations,	6th	Janua	ary.	7th	Janu	ary.	8th	Janu	ary,	9th	Janu	ary.	10tl	Janu	ary.
Sydney, N.S.	N	NE	c	C	sw	sw	N	С	s	s	σ	NE	0	sw	sw
Halifax, "	N	E	E	SE	s	sw	sw	s	sw	sw	NW	a	w	SE	SE
Charl'town, PEI.	N	NE	Ė	SE	s	s	C	SE	sw	w	C	C	С	s	s
Chatham, N.B.	NW	N	C	C	C	N	E	E	s	s	w	C	С	E	NE
Father Point, Q.	s	NE	NE	NE	NE	NE	NE	NE	s	sw	w	sw	c	NE	NE
Montreal, ,,					١.										
Ottawa, Ont.	E	NE	NE	NE	NE	NE	E	sw	sw	E	E	NE	ww	SE	S
Kingston, ,,	NE	NE	G.	NE	NE	NE	NE	sw	sw	sw	s	sw	sw	sw	sw
Toronto, ,,	E	E	N	N	N	N	C	w	sw	sw	SE	sw	sw	sw	sw
Port Dover, "	NE	NE	NE	NE	NE	NE	s	sw	s	s	s	sw	sw	sw	sw
Port Stanley, ,,	NE	NE	N	NW	N	N	N	w	w	sw	s	w	w	w	w
Kincardine, "	E	NE	E	NE	NE	N	NW	w	E	SE	SE	w	w	w	w
augeen, ",	C	c	C	N	N	N	C	NW	s	SE	SE	sw	sw	w	w
ittle Current ,,								j .		į .	.				١.
'ort Garry,Man.	C	s	s	s	S	c	SE	NW	NW.	NW	w	NW	NW	NW	N

5th January.

Stations.

1874.

TABLE B .- A Supplement to Tables I and II., shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich , 0 43 p.m.

1st January.

4 25 p.m.

2nd January.

9 43 p.m.

3rd January.

10 50 p.m.

4th January.

	 -							<u> </u>			-	/ {			
Sydney, N.S.	0	0.	0	0	11	12	0	1	8	10	8	14	8	4	3
Halifax, ,,	2	1	3	9	15	9	0	3	5	4	6	8	15	- 8	3
Charl'town, PEI.	1	0	0	17	14	1	0	5	4	12	8	9	10	11	15
Chatham, N. B.	0	0	0	0	0	0	3	5	3	8	6	15	8	7	6
Father Point, Q.	2	1	1	0	1	2	0	1	6	8	15	23	12	9	7
Montreal, ,,				.]			.						•		•
Ottawa, Ont.	5	4	6	7.	8	12	13	17	21	19	15	5	3	4	2
Kingston, "	4	6	2	3	2	4	8	14	22	18	20	18	4	3	10
Toronto, ,,	2	10	7	2	4	3	3	5	1	9	9	32	1	. 0	6
Port Dover, ,,	8	12	8	3	6	4	4	12	6	14	15	15	4	8	9
Port Stanley, ,,	3	4	1	0	1	6	2	2	1	10	12	12	3	2	6
Kincardine, "	5	8	14	5	9	10	20	21	23	25	33	15	3	1	7
Saugeen, ,,	2	4	5	6	5	7	10	9	10	10	18	20	4	. 0	0
Little Current,,									•			•			
Fort Garry, Man.	6	12	12	6	2	12	17	10	12	1	2	6	13	16	3
Stations.	6th	Janus	ary.	7th	Janua	ry.	8th	Janus	ry	9th	Janus	ry.	10th	Janu	ary.
Sydney,	8	4	0	0	7	5	1	0	8	15	0	1	0	2	1
Halifax, ,,	7	4	11	6	6	5	2	6	15	4	4	0	3	2	. 7
Charl'town, PEI.	5	5	6	11	5	7	0	9	20	14	0	0	0	0	9.
Chatham, N.B.	1	4	0	0	0	2	8	4	14	10	2	0	0	4	7
Father Point, Q.	1	4	5	4	5	2	16	10	2	10	13	5	0	5	5
Montreal, ,,] .] .			
Ottawa, Ont	. 3	5	11	12	8	4	10	9	8	3	4	6	6	8	12
Kingston, ,,	6	10	0	6	9	15	5	18	19	6	2	2	8	20	27
Toronto, ,,	14	15	14	24	6	10	0	14	3	5	2	12	11	18	10
Port Dover ,,	11	Q	9	10	7	12	6	12	12	14	10	9	10	12	13
Port Stanley, ,,	7	5	6	8	7	2	2	5	4	5	7	4	10	6	7
Kincardine, ,,	6	5	7	16	15	17	10	11	6	10	10	20	22	21	21
Saugeen, ,,	0	1 0	0	1	6	5	0	8	6	4	6	11	6	11	10
Little Current "															
Fort Garry, Man.	0	1	8	12	1	0	3	16	23	14	4	3	14	12	5
							69								

Table A.--A Supplement to Tables I and 1I, shewing the Direction of the Wind at various Stations in the Dominion of Canada at the same absolute times, as follows:
Toronto civil time 7 25 a.m. 4 25 p.m. 10 50 p.m.

Greenwich ,,		0 43	p.m			9 43	p.m.			4 08	3 a.m	. (o f	next	day.)
Stations.	11th	Janu	ary.	12th	Janu	ary.	13th	Janua	ary.	14th	Janus	ary.	15th	Janus	ary.
Sydney, N.S.	E	sw	sw	sw	С	w	w	w	w	c	E	E	sw	s w	C
Halifax, ,,	w	sw	sw	ı wı	NW	w	NW	NW	NW	NE	E	SE	w	w	NE
Charl'town, PEI.	С	ន	sw	sw	w	w	w	w	w	С	NE	E	sw	sw	\mathbf{w}
Chatham, N.B.	C	c	W	sw	w	w	W.	w	NW	C	NE	NE	w	sw	C
Father Point, Q.	w	sw	sw	sw	w	w	NW	w	sw	SE	NE	NE	N	sw	W
Montreal, ,,			•	.									.		
Ottawa, Ont.	NW	w	sw	w	w	NW	N	NE	NE	NE	NW	NW	w	w	w
Kingston, ,,	w	w	W	w	w	C	NE	NE.	E	NE	N	NW	w	w	W
Toronto, ,,	w	w	W	w	w	C	NE	SE	SE	N	w	NW	NW	NW	$\mathbf{N}\mathbf{W}$
Port Dover, "	w	w	w	w	w	NW	N	Е	NE	w	w	₩	sw	w	·W
Port Stanley, "	w	NW	NW	NW	NW	NW	N	NE	NE	w	NW	NW	NW	NW	NW
Kincardine, ,,	NW	NW	NW	w	w	E	SE	SE	SE	NW	NW	NW	NW	NW	NW
Saugeen, ,,	NW	w	NW	NE	NE	NE	C	SE	E	E	NW	NW	N	N	N
Little Current,,		. !		ļ .											
Fort Garry, Man.	NW	NW	sw	N	N	N	NW	NW	NW	NW	NW	NW	SE	SE	SE
Stations.	16tl	Janu	ary.	17th	Janu	ary.	18th	Janu	ary.	19th	Janu	ary.	20tb	Janu	ary.
Sydney, N.S.	sw	w	w	sw	w	w	w	sw	sw	sw	sw	sw	NE	NE	NE
Halifax, "	C	w	w	NW	NW	N W	NW	sw	s	sw	s	s	N	NE	NE
Charl'town, PEI.	w	w	sw	w	w	w	С	sw	sw	s	s	S	N	N	N
Chatham, N.B.	C	sw	w	w	w	C	C	sw	sw	sw	s	N	N	NW	C
Father Point, Q.	w	NW	NW	w	sw	NW	sw	w	sw	s	w	N	N	sw	s
Montreal, ,,					! •						1			١.	
Ottawa, Ont.	w	w	w	SE	SE	E	C	NE	E	N	N	w	NW	E	E
Kingston, ,,	C	w	NW	U	sw	sw	sw	sw	sw	S	NE	NE	NE	NE	NE
Toronto, ,,	NW	w	C	C	sw	C	C	B	C	c	N	N	N	E	E
Port Dover, "	w	w	W	s	s	s	S	SE	s	s	NW	N	N	N	E
Port Stanley, "	NW	\mathbf{w}	N	sw	sw	s	SE	SE	SE	O	NW	NW	NW	E	E
Kincardine, ,,	N	N	s	s	s	s	s	SE	SE	w	N	NE	E	E	SE
Saugeen, ,,	N	w	s	SE	s	s	SE	SE	s	C	N	N	C	C	C
Little Current ,,						1.				1.					
Fort Garry Man	. s	SE	S	SE	w	w	W	NW	NE	SE	SE	B	8	NE	SE

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TABLE B .- A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

10 50 p.m.

4 25 p.m. 9 43 p.m. Greenwich 0 43 p.m. 4 08 a.m. (of next day.)

Stations.	11th	Janu	ary.	12th	Janu	ary.	13th	Janu	ary.	14th	Janu	ary.	15th	Janu	ary.
Sydney, N.S.	1	2	4	9	0	10	9	5	8	θ	13	10	13	4	0
Halifax, ,,	6	3	6	3	4	5	5	1	1	7	26	14	7	1	3
Charl'town, PEI.	0	8	6	15	14	14	8	2	1	0	22	25	19	6	8
Chatham, N.B.	0	0	6	13	10	6	6	6	1	0	20	18	12	6	0
Father Point, Q.	1	3	2	15	11	10	7	4	4	1	14	30	19	8	2
Montreal. ,,															
Ottawa, Ont.	9	11	15	4	4	2	2	6	8	8	4	7	12	17	12
Kingston, ,,	10	13	7	1	6	0	5	4	7	6	2	1	3	2	3
Toronto, ,,	21	12	13	18	9	0	2	4	10	8	23	23	15	18	8
Port Dover, ,,	14	12	12	12	6	4	7	8	6	7	13	14	10	18	3
Port Stanley, ,,	7	6	9	4	2	1	1	2	6	1	10	12	18	9	9
Kincardine, "	24	28	21	20	10	6	10	10	6	30	29	23	21	22	14
Saugeen, ,,	20	24	11	6	4	2	0	6	3	2	23	7	12	13	. 9
Little Current ,,													.		
Fort Garry, Man.	15	7	2	3	6	8	3	11	10	10	8	3	4	13	15
Stations.	16th	Janu	ary.	17th	Janu	ary.	18th	Janu	ary.	19tł	Janu	ary.	20tl	Jan	uary.
Sydney, N.S.	1	8	13	9	10	9	2	9	8	15	8	9	16	29	19
Halifax, ,,	0	6	1	6	1	3	1	4	9	8	12	16	17	18	13
Charl'town, PEI.	8	7	14	13	10	10	0	5	6	14	18	10	31	21	14
Chatham, N.B.	0	9	4	3	3	0	0	10	10	5	8	16	8	3	0
Father Point, Q.	7	5	8	3	2	2	4	4	2	8	4	6	5	1	2
Montreal, ,,			! • ;					,							
Ottawa, Ont.	12	14	16	1	4	5	0	4	4	5	15	15	10	2	7
Kingston, "	0	6	7	0	9	7	18	14	9	16	13	14	16	9	4
Toronto, "	13	2	0	0	4	0	0	3	0	0	4	23	10	9	23
Port Dover, ,,	3	9	8	12	10	9	9	4	7	2	7	15	17	7	<u> </u>
***	3	2	1	3	5	4	2	5	6	0	3	12	3	2	2
Port Stanley, "		t .	i	1	23	12	12	15	21	5	30	3	17	8	21
Port Stanley, ,, Kincardine, ,,	18	18	8	14	L 2.,	1 24			į.				1	1	
	18 7	18	8	7	11	111	10	13	 8	0	10	7	0	0	0
Kincardine, "	İ		1		İ		1	1	8	0	10	7	0	0	

25th January

1874.

TABLE A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada. at the same absolute times, as follows:

Toron	to	civil	tim
Green	wi	ch	,,

Stations.

Sydney,

e 7 25 a.m. 0 43 p.m.

21st January.

4 25 p.m. 9 43 p.m.

23rd January.

s sw sw w

22nd January.

10 50 p.m.

24th January.

Halifax, "	N	\mathbf{w}^{-1}	s	SE	SE	s	sw	sw	sw	NW	NW	w	N	NE	N
Charl'town, PEI.	w	SE	s	s	SE	SE	s	8	sw	w	w	w	$_{\mathbf{E}}$	NE	N
Chatham, N.B.	c	sw	c	C	C	s	s	s	w	w	w	c	N	N	NW
Father Point, Q.	w	sw	sw	s	NE	s	NE	NE	w	w	NW	N	NE	w	W
Montreal, ,								.	. 1						
Ottawa, Ont.	NE	N	N	E	E	E	s	w	w	SE	NE	w	c	w	N
Kingston, ,,	s	sw	s	sw	sw	sw	sw	w	w	sw	NW	NW	C	w	C
Toronto, ,,	SE	С	E	С	NW	w	sw	w	sw	sw	NW	w	w	NW	sw
Port Dover, ,,	C	SE	Е	s	s	s	sw	w	sw	s	w	w	w	w	С
Port Stanley, ,,	Е	E	SE	sw	w	w	w	NW	w	sw	NW	NW	NW	NW	c
Kincardine, "	s	s	s	w	w	w	NW	NW	w	NW	w	w	NW	NW	NW
Saugeen, "	c	C	SE	sw	N	N	N	NW	sw	w	NW	w	N	м	SE
Little Current ,,									١. ا		! ; •	 .			
Fort Garry, Man,	w	w	w	w	s	C	w	w	sw	w	NW	NW	SE	SE	SE
Stations.	26tl	ı Janu	ary.	27tl	Janu	iary.	28th	Janu	ary.	29tl	Janu	ary.	30tl	Janu	ary.
Sydney, N.S.	NW	w	w	w	w	sw	C	sw	sw	w	w	w	SE	N	NW
Sydney, N.S. Halifax,	NW NW	W	w nw	w NW	w	sw se	C	sw sw	sw w	W NW	W	w	SE S	N NW	
TT 314		''	i			1	1				, , ,				
Halifax,	NW W	N	NW	NW	C	SE	SE	sw	w	NW	N	w	s	NW	N
Halifax, ,, Charl'town, PEI.	NW W	N NW	NW W	NW W	C SE	SE SE	SE SE	SW SE	w se	nw nw	N W	w sw	s N	NW NW	N NW
Halifax, ,, Charl'town, PEI. Chatham, N.B.	NW W NW	N NW W	NW W	NW W C	C SE C	SE SE C	SE SE NE	SW SE C	W SE C	NW NW W	N W C	w sw c	S N NW	NW NW W	N NW C
Halifax, Charl town, PEI. Chatham, N.B. Father Point, Q.	NW W NW W	N NW W	NW W W	NW W C SW	C SE C	SE SE C	SE SE NE	SW SE C	W SE C	NW NW W	N W C	w sw c	S N NW	NW NW W	N NW C
Halifax, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal,	NW W NW W	N NW W W	NW W W	NW W C SW	C SE C NE	SE SE C NE	SE SE NE NE	SW SE C NE	W SE C N	NW NW W	N W C SW	w sw C N	S N NW W	NW NW W	NW C W
Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont	NW W NW W	N NW W W	NW W W	NW C SW .	C SE C NE .	SE SE C NE	SE SE NE NE	SW SE C NE	W SE C N	NW NW W	N W C SW	W SW C N	S NW W W	NW NW W W	NW C W .
Halifax, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, Ottawa, Ont. Kingston, ,,	NW W NW W	N NW W NE	NW W W E	NW C SW . NE	C SE C NE E E	SE SE C NE ·	SE SE NE NE	SW SE C NE NW	W SE C N	NW W W . NE	N C SW . NE C	W SW C N	S NW W W NE	NW NW W SW	N NW C W . C NE
Halifax, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, Ottawa, Ont. Kingston, Toronto,	NW W NW	N NW W NE NE SE	NW W W E NE	NW C SW NE NE C	C SE C NE E E S	SE SE C NE . E NE C	SE SE NE NE . E NE SW	SW SE C NE NW W	W SE C N W C	NW W W . NE C SW	W C SW . NE C W	W SW C N NW N	S NW W W NE NE	NW NW W SW C	N NW C W . C NE NE
Halifax, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, Ottawa, Ont. Kingston, Toronto, Port Dover, ,	NW W NW C C C S	N NW W NE NE SE	NW W W . E NE NE	NW C SW . NE C S	C SE C NE E S S	SE SE C NE . E NE C S	SE SE NE NE SW W	SW SE C NE . NW W NW NW	W SE C N C C NW	NW W W . NE C SW W SW	W C SW . NE C W SW W	W SW C N N N N	S N NW W W NE NE	NW NW W SW C NE NE	N NW C W . C NE NE NE
Halifax, Charl town, PEI. Chatham, N.B. Father Point, Q. Montreal, Ottawa, Ont. Kingston, Toronto, Port Dover, Port Stanley, ,	NW W NW C S S	N NW W NE NE SE S	NW W W . E NE S SW	NW C SW NE C S C	C SE C NE S SW	SE SE C NE . E NE C SS SW	SE SE NE NE SW W	SW SE C NE . NW W NW NW	W SE C N C C NW NW	NW W W . NE C SW W SW	W C SW . NE C W SW W	W SW C N N N N	S N N W . W NE NE NE	NW NW W . SW C NE NE	N NW C W . C NE NE NE NE
Halifax, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, Ottawa, Ont. Kingston, Toronto, Port Dover, Port Stanley, Kincardine, ,	NW W NW C C S S S	N NW W NE SE S SW S	NW W W L E NE S SW S	NW C SW NE NE C S	C SE C NE S SW S	SE SE C NE . E NE C SS SW C	SE SE NE NE SW W NW NW	SW SE C NE . NW NW NW NW	W SE C N C C NW NW	NW W W . NE C SW W SW NW	W C SW . NE C W SW W NW	W SW C N N N N N N	S NW W NE NE NE SE	NW NW W SW C NE NE NE	N NW C W . C NE NE NE NE SE
Halifax, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, Ottawa, Ont. Kingston, Toronto, Port Dover, Port Stanley, Kincardine, Saugeen, ,	NW W NW C C S S S	N NW W NE SE S SW S	NW W W L E NE S SW S	NW C SW NE NE C S	C SE C NE S SW S	SE SE C NE . E NE C S SW C C	SE SE NE NE SW W NW NW	SW SE C NE . NW NW NW NW	W SE C N C C NW NW	NW W W . NE C SW W SW NW	N W C SW . NE C W SW NW N N	W SW C N N N N N N	S NW W NE NE NE SE	NW NW W SW C NE NE NE	N NW C W . C NE NE NE NE SE

1874.

TABLE B .- A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles per hour, at various Stations in the Dominion of Canada, at the same absolute times as follows:

Toronto civil time 7 25 a.m.

0 43 p.m.

4 25 p.m. 9 43 p.m.

10 50 p.m.

Greenwich ,,

21st	Janus	ıry.	22 nd	Janu	ary.	23rd	Janua	ary.	24th	Janu	ary.	25th	Janu	ary.
4	3	1	4	2	15	13	9	18	14	1	0	0	7	12
8	2	7	1	1	3	13	9	8	9	2	6	4	4	20
2	7	15	8	14	17	11	9	8	21	4	5	10	15	18
0	2	0	0	0	8	8	5	15	15	5	0	4	13	11
2	2	2	1	1	1	3	1	11	12	3	4	2	2	6
.														
13	3	2	3	1	5	3	27	8	3	6	21	0	15	5
16	4	3	18	16	21	4	14	12	5	8	15	0	10	0
8	0	6	0	1	4	3	31	1	7	25	10	12	11	9
0	3	2	11	13	7	12	16	9	12	17	12	11	12	0
2	1	2	2	2	3	2	4	3	1	в	6	6	3	0
15	5	12	4	14	15	21	18	16	9	3 0	28	25	17	12
0	0	7	17	10	5	14	12	10	5	34	17	13	15	4
.														
15	17	10	10	1	0	2	7	1	1	2	3	1	16	8
26th	Janu	ary.	27th	Janu	ary.	28th	Janu	ary.	29th	Janu	ary.	30th	Janu	ary.
12	22	19	11	8	٠,	0	9	16	10	9	1	5	12	7
6	6	4	1	0	12	7	10	15	7	4	5	11	15	2
24	17	8	6	1	6	13	11	14	9	2	6	6	14	6
19	14	3	0	0	0	9	0	0	2	0	0	1	4	0
7	8	6	2	1	2	3	2	6	4	2	5	9	5	4
1	4	13	5	7	3	2	7	11	1	6	14	2	3	0
0	6	13	5	6	7	10	1	0	0	0	4	4	0	11
0	9	1	0	1	0	1	13	0	9	18	18	5	12	16
7	12	12	14	11	12	5	11	8	14	10	16	9	10	14
- 7	3	2	0	2	1	6	12	4	4	3	9	3	8	6
13	8	9	11	9	0	17	18	9	16	22	7	3	10	6
7	2	3	7	0	0	17	17	7	12	16	8	0	18	2
			1	1	i	1	I	ì	: !					1
											١. ا			
	4 8 2 0 2 . 13 16 8 0 2 15 0 . 15 26th 12 6 24 19 7 . 1 0 0 7 7 13	4 3 8 2 2 7 0 2 2 2	8 2 7 2 7 15 0 2 0 2 2 2 	4 3 1 4 8 2 7 1 1 2 7 15 8 0 2 0 0 0 2 2 1 1	4 3 1 4 2 8 2 7 1 1 1 2 7 15 8 14 0 2 0 0 0 0 2 2 2 1 1 1 1 1 1 1	4 3 1 4 2 15 8 2 7 1 1 3 2 7 15 8 14 17 0 2 0 0 0 8 2 2 2 1 1 1 1 13 3 2 3 1 5 16 4 3 18 16 21 8 0 6 0 1 4 0 3 2 11 13 7 2 1 2 2 2 3 15 5 12 4 14 15 0 0 7 17 10 5 15 17 10 10 1 0 1 0 26th January. 27th January. 12 22 19 11 8 1 6 6 4 1 0 12 24 17 8 6 1 6 19 14 3 0 0 0 7 8 6 2 1 2 1 4 13 5 7 3 0 6 13 5 6 7 0 9 1 0 1 0 0 7 12 12 14 11 12 7 3 2 0 2 1 13 8 9 11 9 0	4 3 1 4 2 15 13 8 2 7 1 1 3 13 2 7 15 8 14 17 11 0 2 0 0 0 8 8 2 2 2 1 1 1 3 13 3 2 3 1 5 3 3 1 5 3 1 6 3 3 1 5 3 1 6 3 1 4 3 3 1 12 4 4 3 3 2 11 13 7 12 2 12 3 2 1 12 3 2 1 12 1 4 3 3 2 1 1 1 1 1	4 3 1 4 2 15 13 9 8 2 7 1 1 3 13 9 2 7 15 8 14 17 11 9 0 2 0 0 0 8 8 5 2 2 2 1 1 1 3 1 13 3 2 3 1 5' 3 27 16 4 3 18 16 21 4 14 8 0 6 0 1 4 3 31 0 3 2 11 13 7 12 16 2 1 2 2 2 3 2 4 15 5 12 4 14 15 <td>4 3 1 4 2 15 13 9 18 8 2 7 1 1 3 13 9 8 2 7 15 8 14 17 11 9 8 0 2 0 0 0 8 8 5 15 2 2 2 1 1 1 3 1 11 . <td< td=""><td>4 3 1 4 2 15 13 9 18 14 8 2 7 1 1 3 13 9 8 9 2 7 15 8 14 17 11 9 8 21 0 2 0 0 0 8 8 5 15 15 2 2 2 1 1 1 3 1 11 12 .</td><td>4 3 1 4 2 15 13 9 18 14 1 8 2 7 1 1 3 13 9 8 9 2 2 7 15 8 14 17 11 9 8 21 4 0 2 0 0 0 8 8 5 15 15 5 2 2 2 1 1 1 3 1 11 12 3 13 3 2 3 1 5 3 27 8 3 6 16 4 3 18 16 21 4 14 12 25 8 8 6 10 1 4 3 31 1 7 25 8 8 6 9 12 17 2 1 2 2 2</td><td> 4</td><td>4 3 1 4 2 15 13 9 18 14 1 0 0 8 2 7 1 1 3 13 9 8 9 2 6 4 2 7 15 8 14 17 11 9 8 21 4 5 10 0 2 0 0 0 8 8 5 15 15 5 0 4 2 2 2 1 1 1 3 1 11 12 3 4 2 .</td><td>4 3 1 4 2 15 13 9 18 14 1 0 0 7 8 2 7 1 1 3 13 9 8 9 2 6 4 4 2 7 15 8 14 17 11 9 8 21 4 5 10 15 0 2 0 0 0 8 8 5 15 15 5 0 4 13 2 2 2 1 1 1 3 1 11 12 3 4 2 2 .</td></td<></td>	4 3 1 4 2 15 13 9 18 8 2 7 1 1 3 13 9 8 2 7 15 8 14 17 11 9 8 0 2 0 0 0 8 8 5 15 2 2 2 1 1 1 3 1 11 . <td< td=""><td>4 3 1 4 2 15 13 9 18 14 8 2 7 1 1 3 13 9 8 9 2 7 15 8 14 17 11 9 8 21 0 2 0 0 0 8 8 5 15 15 2 2 2 1 1 1 3 1 11 12 .</td><td>4 3 1 4 2 15 13 9 18 14 1 8 2 7 1 1 3 13 9 8 9 2 2 7 15 8 14 17 11 9 8 21 4 0 2 0 0 0 8 8 5 15 15 5 2 2 2 1 1 1 3 1 11 12 3 13 3 2 3 1 5 3 27 8 3 6 16 4 3 18 16 21 4 14 12 25 8 8 6 10 1 4 3 31 1 7 25 8 8 6 9 12 17 2 1 2 2 2</td><td> 4</td><td>4 3 1 4 2 15 13 9 18 14 1 0 0 8 2 7 1 1 3 13 9 8 9 2 6 4 2 7 15 8 14 17 11 9 8 21 4 5 10 0 2 0 0 0 8 8 5 15 15 5 0 4 2 2 2 1 1 1 3 1 11 12 3 4 2 .</td><td>4 3 1 4 2 15 13 9 18 14 1 0 0 7 8 2 7 1 1 3 13 9 8 9 2 6 4 4 2 7 15 8 14 17 11 9 8 21 4 5 10 15 0 2 0 0 0 8 8 5 15 15 5 0 4 13 2 2 2 1 1 1 3 1 11 12 3 4 2 2 .</td></td<>	4 3 1 4 2 15 13 9 18 14 8 2 7 1 1 3 13 9 8 9 2 7 15 8 14 17 11 9 8 21 0 2 0 0 0 8 8 5 15 15 2 2 2 1 1 1 3 1 11 12 .	4 3 1 4 2 15 13 9 18 14 1 8 2 7 1 1 3 13 9 8 9 2 2 7 15 8 14 17 11 9 8 21 4 0 2 0 0 0 8 8 5 15 15 5 2 2 2 1 1 1 3 1 11 12 3 13 3 2 3 1 5 3 27 8 3 6 16 4 3 18 16 21 4 14 12 25 8 8 6 10 1 4 3 31 1 7 25 8 8 6 9 12 17 2 1 2 2 2	4	4 3 1 4 2 15 13 9 18 14 1 0 0 8 2 7 1 1 3 13 9 8 9 2 6 4 2 7 15 8 14 17 11 9 8 21 4 5 10 0 2 0 0 0 8 8 5 15 15 5 0 4 2 2 2 1 1 1 3 1 11 12 3 4 2 .	4 3 1 4 2 15 13 9 18 14 1 0 0 7 8 2 7 1 1 3 13 9 8 9 2 6 4 4 2 7 15 8 14 17 11 9 8 21 4 5 10 15 0 2 0 0 0 8 8 5 15 15 5 0 4 13 2 2 2 1 1 1 3 1 11 12 3 4 2 2 .

TABLE A .- A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich

0 43 p.m.

9 43 p.m.

Stations.	Stations. 31st January.			1st]	Februs	ry.	2nd	Febru	ary.	3rd	Febru	ary.	4th	Febru	ary.
				I	3.7	37577	2777	1		CTTT	G. 1		ا 🚙		37337
Sydney, N.S.	W	sw	C	N	N	NW	NW	W	W	sw	SE	SE	SE	N	NW
Halifax, ,,	NE	E	N	NW	N	NE	N	N	NW	C	SE	E	NW	NW	NW
Charl'town, PEI.	w	SE	- 1	NW	NW	NW	NW	C	C	C	E	Е	1		NW
Chatham, N.B.	С	G	C	C	NW	NW	C	C	G	O	C	NE	N	NW	C
Father Point, Q.	sw	sw	sw	N	NW	NW	NW	w	sw	C	NE	С	N	s	N
Montreal, ,,		.]		C	C	C	C	N	NE	NE	NE	NE	NE	N	N
Ottawa, Ont.	NW	w	С	NW	NW	C	NE	N	NE	NE	NE	SE	w	N	NW
Kingston, "	NE	C \	C	NE	NE	NE	NE	NE	NE	NE	NE	C	w	C	W
Toronto, ,,	N	N	C	NE	NE	NE	NE	E	E.	C	NW	W	C	a	NW
Port Dover, "	N	NW		NE	NE	NE	NE	NE	S	W	W	NW	sw	W	NW
Port Stanley, ,,	NW	NW	NW	NE	NE	NE	NE	NE	NE	N	N	NW	NW	W	W
Kincardine, "	E	ន	5	ន	E	E	E	E	SE	E	N	N	NW	N	N
Saugeen, "	E	sw	s	SE	E	SE	Е	E	C	C	N	N	G	N	C
Little Current,,								•		•					
Fort Garry, Man.	C	SE	SE	SE	SE	s	S	NW	NW	N	N	W	N	SE	SE
Stations.	5th	Febru	ary.	6th	Febr	uary.	7th	Febru	ary.	8th	Febru	ary.	9th	Febru	ary.
Sydney, N.S.	w	NW	NW	w	NW	w	w	w	w	w	w	w	NW	NW	w
Halifax, "	MM	NM	И	NW	NM	NW	NW	NW	N	NW	N	NW	NW	N	C
Charl'town, PEI.	NW	NW	w	W	NW	w	w	w	w	w	W	w	w	C	C
Chatham, N.B.	w	w	w	NW	NW	w	C	C	C	C	NW	w	W	C	C
Father Point, Q.	NW	w	NW	w	w	w	w	w	w	w	w	w	sw	's	s
Montreal, ,,	N	w	w	NW	sw	0	NE	sw	NW	w	W	w	sw	N	C
Ottawa, Ont.	NW	w	w	C	s	C	E	w	sw	s	s	s	E	C	O
Kingston, "	l·c	sw	C	NE	C	NE	NE	NE	C	C	C	C	C	C	NE
Toronto, "	N	NW	NW	NE	E	NE	NE	C	N	C	C	C	0	w	C
Port Dover, "	w	sw	N	SE	NE	NE	N	N	NW	NW	E	N	C	w	NW
Port Stanley, ,,	N	C	C	NE	NE	NE	NE	N	N	N	SE	SE	NE	NW	NA
Kincardine, ,,	N	E	E	E	E	E	E	N	E	E	E	B	8	NW	NW
Saugeen, ,,	C	sw	NE	SE	E	E	E	C	O	SE	sw	S	s	NW	NV
	1	!	l	1	1 .	1	į	i		İ		1	j	1	
Little Current ,,		l •				١.	1 .		1 .			1 .	į -	i •	1 .

Stations.

4th February.

1874.

TABLE B .- A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

31st January.

4 25 p.m.

2nd February.

10 50 p.m.

3rd February.

0 43 p.m. 9 43 p.m. 4 08 a.m. (of next day.) Greenwich

1st February.

Sydney, N.S.	6	5	0	7	17	7	9	7	2	1	1	6	28	26	10
Halifax, "	1	1	5	9	7	8	8	4	1	0	15	26	11	15	2
Charl'town, PEI.	5	3	0	12	11	8	6	0	0	0	8	21	30	21	12
Chatham, N.B.	0	0	0	0	5	7	0	0	0	0	0	1	16	11	0
Father Point, Q.	5	4	7	6	4	8	5	3	4	0	1	0	6	2	2
Montreal, ' ,,				0	0	0	0	5	10	6	10	4	4	3	2 6
Ottawa, Ont.	5	4	0	1	3	0	2	9	11	3	1	3	11	9	6
Kingston, ,,	10	0	0	2	4	1	10	8	14	4	2	0	2	0	1
Toronto, ,,	10	4	0	в	9	12	11	15	7	0	8	13	0	0	6
Port Dover, ,,	10	4	4	5	10	8	8	5	10	4	6	8	. 7	8	8
Port Stanley, ,,	3	5	1	4	6	7	7	5	1	2	2	5	3	2	2
Kincardine, ,,	3	3	5	6	2	10	15	6	3	1	10	12	20	9	20
Saugeen, "	4	4	1	6	8	7	6	2	0	0	8	8	0	5	0
Little Current ,,												! !			
Fort Garry, Man.	0	1	4	15	20	20	16	10	13	4	2	1	1	5	4
Stations.	5th	Febru	ary.	ftlı	Febru	ary.	7th	Febru	ary.	8th	Febru	ary.	9th	Febru	ary.
Sydney, N.S.	17	7	16	10	13	12	8	7	6	11	10	9	16	12	2
Halifax, ,,	2	10	12	6	6	6	2	9	1	1	5	2	3	5	0
Charl'town, PEI.	13	12	15	26	14	8	9	0	9	12	6	13	6	1 0	0
Chatham, N. B.	3	14	7	12	18	2	0	0	0	0	4	1	3	0	0
Father Point, Q.	5	8	11	7	6	5	4	4	3	4	5	3	1	1	2
Montreal, ,,	10	13	10	15	5	0	11	4	9	30	25	30	8	4	0
Ottawa, Ont.	в	8	5	0	2	0	4	3	2	1	4	3	1	0	0
Kingston, "	0	4	0	:1	0	12	8	13	0	0	0	0	0	0	4
Toronto, "	2	7	1	8	16	15	11	0	4	0	0	0	0	1	0
Port Dover, ,,	4	3	6	6	6	8	7	8	5	4	1	3	0	5	13
Port Stanley, "	2	0	0	2	3	6	5	2	1	1	2	3	1	4	2
Kincardine, "	8	5	5	10	19	10	8	3	6	3	8	7	6	21	17
Saugeen, ,,	0	2	2	4-	7	9	7	0	0	3	4	5	3	20	ر17
Little Current,,															
															ı
Fort Garry, Man.	12	10	18	8	6	4	16	10	32	20	15	4	0	2	6

sw

 \mathbf{SE}

1874.

Table A.—A Supplement to Tables I. and II., showing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. 25 p.m. 10 50 p.m. 9 43 p.m. 0 43 p.m. 4 08 a.m. (of next day.) Greenwich 10th February. Stations. 11th February. 12th February. 13th February. 14th February. NW C NE NE NE w w w w sw w sw w Sydney. N.S swsw NW NE NE N NW NW W N W C Halifax. S S 8 swSW NE NE N w w Charl'town, PEI. \mathbf{C} NW w W \mathbf{c} S \mathbf{s} 8 SW sw C C NW NW w w swChatham. N.B. C \mathbf{C} \mathbf{C} \mathbf{C} \mathbf{C} S w NW C C w W NW NWNW sw \mathbf{C} Father Point, Q. \mathbf{S} S S S SW w NW N Montreal. NW W N NW NE NE N S \mathbf{s} sw sw sw sww w SW \mathbf{C} W w NW Ottawa. Ont NE NE \mathbf{E} S S w S W sw w w NW w \mathbf{C} N NE NE SES SW w w C Kingston, ,, sw W \mathbf{C} N W C \mathbf{E} \mathbf{E} \mathbf{E} SW N NWW swC Toronto. w \mathbf{E} NW SW W w W N N S SE w W S C Port Dover, Port Stanley, NE W NW NW \mathbf{C} NW \mathbf{E} SE SE 8 NW NW \mathbf{C} S C Kincardine, S S NW NW NW SE SE S S 8 N NW w S S W S \mathbf{C} NW N Е SE SE S sw NW N NW sw S Saugeen, Little Current ,, NWN N SE S NWNWNW w W C C S SE Fort Garry, Man. 15th February. 16th February. 17th February. 19th February. Stations. 18th February. sw N.S. NW E \mathbf{E} \mathbf{E} \mathbf{E} C sw W w w NW N C sw Sydney, sw w w N SE SE SE NE NW sw Halifax. E NW NW NW S w \mathbf{C} sww w Charl'town, PEI. S SW \mathbf{E} O NW NW w O S s swC N C w Chatham, N.B. W C NE NW NW NW C C C sw C swFather Point, Q. C NE S NE S w W N SW swsw sw sw sw SE S 8 SW sw NW NW SW C S S N S S Montreal, ,, w SE Ont. \mathbf{E} Е \mathbf{E} \mathbf{E} sw C NW w NW C \mathbf{E} NW O Ottawa, \mathbf{C} S \mathbf{s} S W NW NW NW \mathbf{C} \mathbf{C} swE sw swKingston, SE w SE S SE w NW N N N NE \mathbf{E} \mathbf{E} swC \mathbf{S} Toronto. •• \mathbf{E} S S SW W W NW N NE NE NE NE s Port Dover. S 8 E SE C W NW W NW N \mathbf{N} NE E w C \mathbf{E} \mathbf{S} Port Stanley, S Kincardine, SE 8 S NW NW NW N N NE \mathbf{C} SE SE S S

N

N

sw

EC

S S SW

SE

SE

NW

s sw

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S SE

SE

SE | SE

Saugeen,

'Little Current ,,

Fort Garry, Man.

s sw

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NW NW

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Table B.—A Supplement to Tables I and II, shewing the Velocity of the Wind,in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich

Stations.

0 43 p.m.

9 43 p.m.

10th February. | 11th February. | 12th February. | 13th February. | 14th February.

1			(ı						,		- 1	1	
Sydney, N.S.	0	4	9	16	11	17	20	10	6	5	3	8	19	19	10
Halifax, ,,	1	12	13	15	6	6	7	5	4	0	5	15	24	1.4	2
Charl'town, PEI.	0	0	12	21	13	11	16	5	6	0	7	31	33	12	9
Chatham, N.B.	0	0	0	13	16	5	5	0 1	0	0	0	13	23	6	18
Father Point, Q.	0	0	1	4	4	10	8	5	3	0	10	23	1	19	12
Montreal, ,,	4	10	16	11	2	15	4	9	15	20	15	10	5	14	13
Ottawa, Ont.	11	12	2	0	18	3	3	4	7	5	10	2	35	1	5
Kingston, ,,	3	1	3	0	4	3	4	9	3	25	27	2	12	20	0
Toronto, "	1	5	0	2	8	0	10	13	1	3	12	20	11	10	0
Port Dover, ,,	5	7	5	10	6	4	4	4	12	24	4	16	4	16	0
Port Stanley, ,,	1	7	5	3	0	2	2	3	10	13	8	4	0	4	0
Kincardine, "	9	4	11	16	20	12	23	25	24	18	10	15	12	9	6
Saugeen, ,,	6	3	0	19	2	6	17	13	16	12	14	15	17	9	12
Little Current ,,							,								
Fort Garry, Man.	5	4	7	10	10	26	28	4	5	2	1	0	0	3	3
Stations.	15th	Febru	ary.	16th	Febru	ary.	17th	Febru	ıary.	18th	Febr	uary.	19th	Febru	lary.
Sydney, N.S.	13	2	2	9	8	0	7	11	10	14	11	7	1	0	5,
Halifax, ,,	6	6	14	15	1	7	10	4	8	4	6	4	1	6	6
Charl'town, PEI.	6	2	3	18	0	0	10	6	8	6	7	6	0	8	15
Chatham, N.B.	5	0	0	3	2	0	7	17	18	23	14	0	0	0	8
Father Point, Q.	0	2	1	1	0	1	8	27	33	5	4	8	5	6	34
Montreal, ,,	8	14	15	15	9	16	7	17	4	0	2	3	9	20	10
Ottawa, Ont.	6	6	3	5	17	25	0	18	7	3	0	2	11	2	0
Kingston, "	0	19	25	16	18	14	3	6	0	0	1	3	6	19	16
Toronto, "	2	5	1	9	27	18	10	7	2	9	14	12	10	9	0
Port Dover, "	4	11	14	12	19	18	13	8	7	3	6	7	12	16	7
Port Stanley, "	4	5	0	7	7	7	2	5	2	1	4	5	8	2	0
Kincardine, "	15	15	5	29	30	30	15	4	5	0	10	20	15	10	10
Saugeen, ,,	7	8	9	23	36	17	11	4	1	0	10	8	20	16	10
Little Current ,,	١.		.			.									
Fort Garry, Man.	1	4	2	3	7	10	15	27	26	10	5	25	24	10	, 8
5—12						17	77						<u>'</u>		<u></u>

TABLE A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil to Greenwich ,,	ime		5 a.m 3 p.n			4 25 9 43	p.m 3 p.m	•		10 5 4 0	0 p.n 8 a.n	n. n. (of	next	day	.)
Stations.	20th	Febru	ıary.	21st	Febru	ary.	22nd	Febr	uary.	23rd	Febr	ary.	24th	Febr	uary
Sydney, N.S.	sw	sw	c	NE	E	U	C	NE	NE	E	E	C	NW	w	w
Halifax, ,,	8	sw	w	N	s	SE	NW	NE	NE	E	SE	C	w	N	NW
Charl'town, PEI.	s	sw	sw	N	NE	NE	C	N	C	E	E	E	NW	w	w
Chatham, N.B.	sw	С	sw	C	c	O	NW	C	C	C	NE	\mathbf{c}	w	NW	C
Father Point, Q.	sw	w	NW	s	SE	C	NW	C	N	NE	E	C	w	w	w
Montreal, "	s	\mathbf{w}	N	N	N	N	N	NE	N	N	sw	N	w	sw	sw
Ottawa, Ont.	sw	NW	NW	N	С	w	NW	NE	NE	NE	s	w	w	С	N
Kingston, "	sw	w	NE	NE	NE	NE	NE	NE	NE	C	sw	NW	N	w	C
Toronto, ,,	C	NW	NE	N	N	N	NE	E	- Е	E	w	w	NW	sw	sw
Port Dover, "	w	C	E	N	NE	N	NE	NE	NE	\mathbf{c}	w	w	w	s	C
Port Stanley, "	sw	C	w	NE	N	N	NE	NE.	NE	NE	w	w	NW	sw	w
Kincardine, ,,	N	N	C	C	NW	NW	E	E	s	ន	sw	w	w	w	w
Saugeen, ,,	NW	C	C	NE	C	N	E	E	C	s	w	NW	E	sw	NE
Little Current,,															
Fort Garry, Man.	C	NW	NW	w	sw	sw	SE	NE	N	NW	NW	w	C	sw	sw
Stations.	25th	Febru	iary.	26th	Febru	ıary.	27th	Febr	uary.	28th	Febru	ary.	1s	Mar	ch.
Sydney, N.S.	w	w	С	Æ	NE	c	sw	w	c	N	NW	w	w	С	s
Halifax, ,,	NW	sw	ន	NE	w	NW	w	w	NW	NW	N	C	N	s	sw
Charl'town, PEI.	sw	sw	NE	NE	N	NW	C	sw	w	w	C	C	C	SE	sw
Chatham, N.B.	σ	O	σ	C	C	C	C	w	w	C	NW	C	σ	sw	C
Father Point, Q.	sw	sw	sw	SE	8	ន	sw	w	w	NW	sw	NE	sw	sw	
Montreal, ,,	sw	σ	NW	NW	sw	sw	sw	NW	NW	w	sw	w	s	sw	sw
Ottawa, Ont.	C	NE	sw	W	s	sw	w	NW	NW	C	s	C	sw	s	ន
Kingston, ,,	SE	NE	NE	NW	sw	sw	w	NW	C	C	C	C	S	sw	w
Toronto, ,,	N	N	N	NW	sw	w	sw	NW	NW	sw	s	8	sw	w	sw
Port Dover, ,,	NE	NE	NW	С	sw	sw	w	w	sw	sw	S	C	sw	S	s
Port Stanley, ,,	N	N	NW	NW	sw	sw	w	ĸw	w	w	sw	С	sw	sw	C
Kincardine, "	E	SE	s	sw	sw	w	w	w	sw	w	w	SE	sw	sw	sw
Saugeen, ,,	c	NE	NE	s	sw	sw	NW	NW	NE	sw	C	sw	sw	sw	sw
Little Current,,	.												С		
Fort Garry, Man.	s	B	S	w	N	NE	E	N	N	s	s	sw	SE	sw	sw

Stations.

24th February.

1874.

TABLE B .-- A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich 0 43 p.m. 4 25 p.m. 9 43 p.m.

20th February. 21st February.

22nd February.

10 50 p.m.

23rd February.

Sydney, N.S.	10	15	0	5	4	0	0	7	1	1	3	0	16	4	9
Halifax, ,,	6	15	2	3	6	3	4	5	8	10	8	0	9	5	2
Charl'town, PEI.	17	7	10	5	1	3	0	9	0	10	- 11	9	9	4	6
Chatham, N.B.	3	0	1	0	0	0	4	0	0	0	5	0	17	11	0
Father Point, Q.	9	3	9	2	6	0	3	0	2	3	16	0	5	. ,9	10
Montreal, ,,	7	3	11	18	18	11	14	16	22	19	32	14	5	8	8
Ottawa, Ont.	6	6	5	5	0	2	6	4	7	7	12	32	6	0	4
Kingston, "	4	1	5	7	4	3	8	14	8	0	30	17	1	10	0
Toronto, ,,	0	4	6	6	6	11	10	3	12	4	25	27	2.	8	7
Port Dover, ,,	7	0	4	8	8	9	14	12	10	0	25	14	5	12	•
Port Stanley, "	1	0	2	2	3	2	4	3	2	2	11	7	1	4	2
Kincardine, "	13	1	0	0	8	3	8	9	6	10	27	27	12	8	16
Saugeen, ,,	12	0	0	1	0	1	3	5	0	11	28	20	5	4	1
Little Current,,					١.										
Fort Garry, Man.	0	9	7	2	4	8	9	1	16	9	14	7	0	5	1
Stations.	25th	Febru	uary.	26th	Febru	uary.	27th	Febr	uary.	28th	Febr	uary.	1s	t Mare	eh.
Sydney, N.S.	12	5	0	12	18	0	6	3	0	11	4	1	3	0	10
Halifax, ,,	2	6	6	12	10	1	1	5	12	1	4	0	1	6	9
Charltown, PEI.	7	2	1	10	5	1	0	4	11	9	0	0	0	11	9
Chatham, N.B.	0	0	0	0	0	0	0	15	10	0	3	0	0	7	
Father Point, Q.	4	3	3	2	1	4	6	11	13	12	3	3	5	5	
Montreal, ,,	7	0	11	12	13	15	111	11	11	12	13	5	6	28	19
Ottawa, Ont.	0	2	3	7	13	9	12	11	3	0	7	0	5	12	6
Kingston, "	4	5	4	3	12	9	3	8	0	0	0	0	2	9	4
Toronto, "	10	10	15	2	13	10	9	10	1	3	4	3	1	10	6
Port Dover, "	3	15	10	0	13	8	10	10	6	10	13	0	11	13	3,
Port Stanley, ,,	4	8	5	1	4	6	7	4	5	1	2	0	1	1	0
Kincardine, "	10	9	4	10	12	15	15	12	10	7	2	6	9	6	7.
Saugeen, "	o	1	1	2	15	22	17	1	2	7	0	1	8	12	6
Little Current,,				.			ļ ! '						0	١,	
Fort Garry, Man.	6	14	31	8	1	1	3	7	3	5	13	10	1	9	10
						,	,		•	1	1				

Table A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Statious in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

Greenwich "

0 43 p.m.

9 43 p.m.

Stations.	2ne	d Mar	ch.	3re	d Mar	ch.	4t]	n Mar	ch.	5tl	Mar	ch.	6tl	Mar	ch.
Sydney, N.S.	sw	NE	s	s	sw	sw	sw	s	ន	s	NE	N	N	NW	N
Halifax, ,,	w	s	s	sw	SE	SE	s	SE	8	N	NE	N	N	N	N
Charl'town, PEI.	N	NW	NE	ន	s.	ន	ន	s	s	NW	N	N	N	N	NW
Chatham, N. B.	C	C	C	C	s	C	ន	ន	sw	NW	NW	NW	NW	N	C
Father Point, Q.	s		w	s	S	s	s	w	w	NW	w	N	N	s	NE
Montreal, ,,	sw	sw	s	s	sw	s	w	N	NW	N	w	N	N	N	N
Ottawa, Ont.	C	s	O	SE	SE	ន	NW	NW	NW	NW	sw	sw	NE	E	NE
Kingston, "	sw	sw	sw	ន	sw	gw	N	N	N	NE	C	C	NE	E	E
Toronto, · ,,	C	sw	sw	sw	E	sw	N	N	N	N	SE	E	Е	E	E
Port Dover, "	s	ន	s	S	s	s	NW	NW	w	N	E	NE	NE	NE	E
Port Stanley, "	C	sw	C	SE	s	С	NW	NW	NW	NW	E	SE	NE	E	NE
Kincardine, "	sw	sw	s	SE	ន	N	N	N	c i	E	SE	SE	E	SE	SE
Saugeen, "	sw	sw	sw	S	s	N	C	C	C	C	N	C	SE	SE	SE
Little Current ,,	ន			C			N			c			NB		•
Fort Garry, Man.	NW	NW	NE	NE	NW	w	sw	s	ន	SE	SE	sw	SE	W	NW
Stations.	7t)	h Mar	ch.	8t)	h Mar	ch.	9t	h Mar	ch.	10t	h Mar	ch.	11t	h Mar	ch.
Stations. Sydney, N.S.	7t	n Mar	ch. NE	8t)	h Mar	ch.	9ti	h Mar	sw	10t	h Mai	ch.	11t	h Mar N	w
		i			 	<u> </u>		 I	 I		<u></u> -			l	
Sydney, N.S.	NE	NE	NE	c	SE	SE	E	w	sw	sw	sw	c	N	N	w
Sydney, N.S. Halifax, ,,	NE N	ne N	NE NE	C SE	SE SE	SE SW	E	w	sw c	sw sw	sw se	С С	N NW	N NW	w w
Sydney, N.S. Halifax, ,, Uharl'town, PEI.	NE N	NE N C	NE NE C	C SE C	SE SE	SE SW SB	E W SW	w sw	sw c sw	sw sw	sw se c	с с	N NW C	N NW NW	W W NW
Sydney, N.S. Halifax, ,, Charltown, PEI. Chatham, N.B.	NE N NW	NE N C C	NE NE C	C SE C N	SE SE SE	SE SW SB	E W SW SW	w sw sw	sw c sw	sw sw s	SW SE C	с с с	N NW C	N NW NW	W W NW SW
Sydney, N.S. Halifax, ,, Uharl'town, PEI. Chatham, N.B. Father Point, Q.	NE N NW C	NE N C C	NE NE C C	C SE C N	SE SE SE N	SE SW SB NW NE	E W SW SW	w sw sw c	SW C SW O NE	SW SW S C	SW SE C C		N NW C C	N NW NW C	W W NW SW
Sydney, N.S. Halifax, ,, Charl town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,,	NE N NW C W N	NE N C C S	NE C C S	C SE C N NE	SE SE SE N NE SW	SE SW SB NW NE SW	E W SW SW S	w sw sw C w	SW C SW O NE SW	SW SW C NE SW	SW SE C C NE SW	C C C C W	N NW C C SW SW	N NW NW C W	W W NW SW NW
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont.	NE N NW C W N	NE C C S N	NE NE C C S S	C SE C N NE S SE	SE SE SE N NE SW	SE SW SB NW NE SW	E W SW SW S NW	w sw sw C w	SW C SW O NE SW	SW SW S C NE SW	SW SE C NE SW	C C C W	N NW C C SW SW	N NW NW C W SW	W W NW SW NW NW
Sydney, N.S. Halifax, ,, Charltown, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Ringston, ,,	NE N N C W N E	NE N C C S N S N SE	NE C C S S	C SE C N NE S SE W	SE SE SE N NE SW SW	SE SW SB NW NE SW SW	E W SW SW S NW W	w sw sw C w w	sw c sw o ne sw w	SW SW S C NE SW W	SW SE C NE SW NW	C C C W NW N	N NW C C SW SW NW	N NW NW C W SW NW	W W NW SW NW NW NW
Sydney, N.S. Halifax, ,, Charl town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingston, ,, Toronto, ,,	NE N N C W N E E	NE N C C S N SE SE SW	NE C C S S E SW SW	C SE C N NE S SE W SW	SE SE N NE SW SW W	SE SW SB NW NE SW SW W	E W SW SW S NW W	W SW SW C W W	SW C SW O NE SW W N	SW SW S C NE SW W NW	SW SE C C NE SW NW N	C C C C W NW N N N N N N N N N N N N N N	N NW C C SW SW NW NW	N NW NW C W SW NW NW NW	W NW SW NW NW NW NW
Sydney, N.S. Halifax, ,, Charl town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Ringston, ,, Toronto, ,, Port Dover, ,,	NE N N N C W N E E E	NE C C S N SE SW SW	NE C C S S E SW SW SW	C SE C N NE S SE W SW W	SE SE SE N NE SW W W	SE SW SB NW NE SW SW W	E W SW S NW W W	W SW SW C W W N	SW C SW O NE SW W N	SW SW SC NE SW W NW NW	SW SE C NE SW NW N N	C C C C W NW NW NW	N NW C C SW SW NW NW	N NW NW C W SW NW NW NW	W W NW NW NW W W
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Ringston, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,,	NE N N V C W N E E E	NE C C S N NE SE SW SW	NE C C S S E SW SW SW W	C SE C N NE S SE W SW W W	SE SE SE N NE SW W W W	SE SW SB NW NE SW SW W W	E W SW S NW W W NW	W SW SW C W W N N NW	SW C SW O NE SW W N NW NW	SW SW S C NE SW W NW NW NW	SW SE C NE SW NW N N N NW	C C C C W NW NW NW NW	N NW C SW SW NW NW NW	N NW NW C W SW NW NW NW	W W NW SW NW NW W NW
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingston, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,, Kincardine, ,,	NE N NW C W N E E E E SE	NE C C S N NE SE SW SW SW	NE C C S S E SW SW W	C SE C N NE S SE W SW W W	SE SE N NE SW W W SW W	SE SW SB NW NE SW W W W	E W SW SW S NW W W NW	W SW SW C W W N N NW NW	SW C SW O NE SW W N NW NW	SW SW SW C NE SW W NW NW NW	SW SE C NE SW NW N N N N	C C C C W NW NW NW NW NW	N NW C C SW SW NW NW NW	N NW NW C W SW NW NW NW	W W NW NW NW W W NW
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Ringston, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,, Kincardine, ,, Saugeen, ,,	NE N NW C W N E E E E E NE	NE C C S N NE SE SW SW SW	NE C C S S E SW SW W	C SE C N NE SE W W W W W	SE SE N NE SW W W SW W	SE SW NW NE SW W W W NW NW	E W SW S NW W W NW NW	W SW SW C W W N N NW NW	SW C SW O NE SW W N NW NW	SW SW S C NE SW NW NW NW NW NW	SW SE C NE SW NW N N N N	C C C W NW NW NW NW NW NW NW	N NW C C SW SW NW NW NW NW NW	N NW NW C W SW NW NW NW	W W NW SW NW NW W LE. W W NW NW NW NW NW NW NW NW NW NW

1874.

Table B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

7 25 a.m. 4 25 p.m. 0 43 p.m. 9 43 p.m.

Stations.	2nc	l Mar	ch.	310	l Mar	ch.	4t]	n Mar	ch.	5t]	n Mar	ch.	6tl	ı Mar	ch.
Sydney, N.S.	5	2	1	1	5	11	12	17	24	15	10	11	13	5	6
Halifax, "	2	5	7	4	1	2	16	20	15	4	9	16	12	20	12
Charl'town, PEL	14	2	8	15	16	17	21	22	20	11	15	21	20	20	13
Chatham, N.B.	0	0	0	0	9	0	16	11	8	14	12	10	8	15	0
Father Point, Q.	3	6		8	4	11	16	11	20	8	7	11	11	2	6
Montreal, ,,	1	9	10	7	10	16	8	12	15	10	6	5	10	14	10
Ottawa, Ont.	0	13	0	2	4	15	25	20	7	3	4	1	3	10	11
Kingston, "	5	7	11	8	21	15	18	6	2	1	0	0	6	10	8
Toronto, "	0	14	3	2	3	10	18	17	11	2	5	12	20	25	19
Port Dover, "	2	10	16	6	3	12	14	10	5	5	7	10	12	6	3
Port Stanley, "	0	1	0	4	1	0	10	15	2	1	1	5	4	2	3
Kincardine, ,,	10	24	18	12	15	18	23	12	0	8	5	15	25	27	25
Saugeen, ,,	10	13	8	7	9	11	0	0	0	0	4	0	8	15	9
Little Current ,,	2	•		0			14			0	•		20		
Fort Garry, Man.	33	17	6	4	7	6	4	10	9	3	6	7	2	7	15
Stations.	7tl	Mar	c h.	8t]	h Mar	ch.	9t1	Mar	ch.	10t	h Mai	ch.	11t	h Mai	ch.
Sydney, N.S.	4	3	1	0	13	12	2	9	8	4	4	0	5	4	4
Halifax, "	8	4	2	9	11	в	5	2	0	1	4	0	2	2	4
Charl'town, PEI.	12	0	0	0	20	10	6	6	4	6	0	0	0	6	1
Chatham, N.B.	0	0	0	3	8	4	5	0	0	0	0	0	0	0	2
Father Point, Q.	1	1	1	1	11	8	1	2	8	14	6	0	13	11	15
Montreal, ,,	15	5	8	6	13	20	23	20	16	22	24	16	12	15	8
Ottawa, Ont.	19	12	2	9	11	11	20	1.9	20	23	15	12	15	19	10
Kingston, "	7	4	10	10	13	17	18	10	18	10	3	2	7	4	2
Toronto, ,,	17	12	16	14	23	30	20	24	4	20	18	19	15	34	30
Port Dover, ,,	7	24	22	20	19	19	20	24	14	16	22	23	18	24	23
Port Stanley, "	9	12	6	8	12	12	12	9	10	8	7	3	11	9	9
Kincardine, "	20	25	27	35	33	35	34	36	25	25	24	34	33	30	30
Saugeen, "	20	12	13	10	17	20	26	23	22	15	21	29	19	27	27
				,	ı	ŀ	1		t	l !	!			1 1	
Little Current ,, Fort Garry, Man.	21			27	į ·	· ·	1.5		•	23	•	•	21	•	•

Stations.

Sýdney,

16th March.

TABLE A .- A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich

4 25 p.m. 9 43 p.m.

10 50 p.m.

15th March.

ΝE

0 43 p.m.

12th March.

14th March.

13th March.

sw sw

4 08 a.m. (of next day.)

		1	1 "	1 ''	~"	~"	1 "	1	1 "			1	1] _	1
Halifax, ,,	W	w	w	w	w	NW	NW	NW	C	NW	N	NE.	N	sw	W
Charl'town, PEI	W	sw	sw	sw	sw	C	w	NW	NW	NW	NW	w,	C	C	, C
Chatham, N.B.	. sw	W	W	sw	sw	sw	NW	NW	W	C	C	C	C	sw	C
Father Point, Q	. sw	sw	W	sw	sw	sw	sw	sw	W	w	w	₿₩	B	B	8
Montreal, ,,	sw	sw	sw	w	sw	NW	W	NW	NW	NW	s	sw	C	N	C
Ottawa, Ont.	\mathbf{w}	w	w	NW	w	NW	NW	NW	NW	C	SE	E	N	N	N
Kingston, ,,	NW	W	NW	NW	NW	NW	NW	O	C	C	C	NE	NE	C	C
Toronto, ,,	N	N	NW	NW	N	NW	NW	NW	N	C	E	E	E	E	к
Port Dover, "	NW	NW	W	w	w	w	w	w	C	C	E	N	N	E	E
Port Stanley, ,,	NW	ŃW	NW	NW	NW	NW	NW	w	C	NE	E	NE	NE	E	E
Kincardine, ,,	ŊW	NW	NW	NW	NW	NW	SE	NW	E	S	sw	S	SE	8	s
Saugeen, ,,	N	NW	NE	N	NW	NW	C	C	0	C	SE	SE	C	NE	C
Little Current ,,	w			N	١.		C		.	C			SE		
Fort Garry, Man.	NW	NW	S	S	SE	SE	SE	sw	S	S	SE	SE	E	E	SE
Stations.	17t	h Mar	ch.	18t	h Mar	ch.	19t	h Mar	ch.	20t	h Mar	ch,	21	t Mai	ch.
Sydney, N.S.	şw	w	c	w	s	sw	w	SE	s	w	w	w	w	w	sw
Halifax, ,,	w	w	С	C	SE	sw	SE	sw	sw	w	NW	NW	NW	NW	sw
Charl'town, PEI.	sw	C	sw	sw	ន	s	C	Ċ	w	w	w	w	w	sw	sw
Chatham, N.B.	c	C	C	C	sw	sw	C	C	sw	w	w	w	w	sw	N
Father Point, Q.	B	ន	s	ន	ន	ន	C	w	sw	. w	w -	NW	w	NW	sw
Montreal, ,,	N	C ·	sw	sw	C	sw	C	sw	sw	NW	w	w	sw	sw	sw
Ottawa, Ont.	NE	NE	NE	NE	ន	N	C	w	\mathbf{w}	NW	w	SE	s	w	w
Kingston, "	E	s	sw	s	C	sw	s	w	w	NE	sw	W	sw	w	ď
Toronto, ,,	E	Æ	E	C	SE	NE	C	NW	w	w	w	sw	sw	w	N
Port Dover, ,,	E	С	s	E	C	S	ន	w	w	C	w	s	sw	s	₩
Port Stanley, ,,	E	E	SE	SE	s	c	c	NW	NW	w	sw	sw	sw	sw	NW
Kincardine, ,,	SE	s	s	ន	s	s	s	w	N	N	w	sw	NW	N	O
Saugeen, ,,	SE	SE	SE	c	c	C	sw	NW	NW	C	sw	sw	sw	NW	C
Little Current ,,	E			sw		.	C		.	С		.	s		
Fort Garry, Man.	8	NW	NW	NW	N	NE	sw	w	NW	NE	NW	NW	w	w	NW
The state of the s					·	18	2					·	'	لدنسب	أسمد
•															

16th March.

1874.

TABLE B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

12th March.

4 25 p.m. 9 43 p.m.

14th March.

13th March.

10 50 p.m. 4 08 a.m. (of next day.)

15th March.

s	-/			.			.!	<u> </u>	-	.!			-		
Sydney, N.S	. 8	10	12	15	6	8	9	3	11	7	6	0	1	0	0
Halifax, "	6	12	8	10	10	4	3	3	0	4	5	3	2	4	2
Charl'town, PEI	. 18	9	4	18	3	0	10	10	7	9	4	1	0	0	0
Chatham, N.B	. 8	8	10	14	6	12	18	11	1	0	0	- 0	0	1	0
Father Point ,,	34	30	26	26	27	22	11	5	5	3	4	4	3	2	1
Montreal, ,,	6	13	13	10	7	3	2	16	9	3	5	7	0	5	0
Ottawa, Ont	10	22	14	13	18	14	14	11	8	0	4	5	4	3	4
Kingston, "	4	6	5	8	4	3	6	0	0	0	0	1	73	0	0
Toronto, ,,	10	14	19	18	14	12	16	10	6	0	6	8	9	10	6
Port Dover, ,,	16	15	12	16	18	4	8	6	0	. 0	5	8	7	8	7
Port Stanley, ,,	8	9	5	4	7	4	2	2	0	1	2	3	2	2	3
Kincardine, ,,	30	30	20	21	21	13	1	5	4	7	5	2	12	6	6
Saugeen, ,,	10	20	3	11	14	10	0	0	0	0	6	9	0	2	0
Little Current,,	16		•	. 9			0			0	1	,	5		
Fort Garry, Man.	1	4	1	2	17	17	20	12	16	5	11	6	9	17	18
Stations.	171	h Ma	rch.	18t	h Mai	rch.	19t	h Ma	rch.	20t	h Mai	ch.	21	t Mar	ch.
Sydney, N.S.	5	7	0	2	5	9	1	4	6	10	21	30	20	12	1
Halifax, ,,	5	4	0	0	6	12	2	6	1	7	15	10	9	8	7
Charl'town, PEI.	3	. 0	2	5	- 8	2	0	0	13	21	35	30	37	10	4
Chatham, N.B.	0	0	0	0	13	9	0	0	11	17	21	19	13	1	1.
Father Point, Q.	1	. 1	1	20	4	3	0	2	35	49	40	54	12	5	1
Montreal, ,,	3	0	11	17	0	2	0	25	7	8	11	13	19	26	2
Ottawa, Ont.	3	5	3	4	6	4	0	8	20	10	16	2	10	20	2 .
Kingston, ,,	2	10	12	11	0	3	5	19	21	4	8	4	6	9	0
Toronto, ,,	6	6	5	0	1	1	0	20	16	12	13	8	4	18	19
Port Dover, "	7	0	6	3	0	4	8	22	11	0	4	12	12	12	6
Port Stanley, ,,	3	2	1	1	1	0	0	3	12	3	4	2	3	3	8
Kincardine, ,,	15	15	15	3	3	3	15	14	15	3	8	15	13	12	0
Saugeen, ,,	6	12	10	0	0	0	10	22	16	0	5	5	17	11	0
Little Current,,	12	.	-	9	.	.	0	.]	.	0	.	. 1	23	.	
Fort Garry, Man.	. 11.	_20	20	11	7	1	4	5	2	3	18	9	5	15	31

Table A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p. m. 9 43 p. m. 10 50 p.m.

4 08 a. m. (of next day.)

Stations.	22n	l Mar	ch.	23r	d Mar	ch.	24t	h Mar	ch.	25t	n Mar	ch.	26t	h Mar	ch.
Sydney, N.S.	c	NE	c	sw	N	w	N	w	w	\mathbf{w}	w	sw	sw	E	E
Halifax, ,,	w	NW	NW	NW	N	NW	NW	NW	NW	NW	sw	sw	w	sw	C
Charl'town, PEI.	NE	N	С	w	N	N	NW	NW	w	w	sw	sw	sw	NE	E
Chatham, N.B.	C	NW	Q	C	NW	C	NW	w	w	sw	sw	sw	N	SE	E
Father Point, Q.	c	w	NW	N	sw	NW	w	w	w	s	w	sw	w	w	NE
Montreal, ,,	N	N	SE	sw	NW	NW	NW	sw	sw	sw	\mathbf{sw}	sw	NE	N	sw
Ottawa, Ont.	w	NE	w	w	w	NW	w	NW	sw	ន	s	s	NW	NE	w
Kingston, ,,	w	sw	w	w	NW	N	\mathbf{w}	w	sw	sw	sw	sw	sw	sw	w
Toronto, ,,	sw	sw	NW	NW	NW	w	w	w.	sw	sw	sw	sw	sw	w	NW
Port Dover, ,,	w	sw	NW	w	NW	w	w	sw	s	sw	sw	sw	s	sw	w
Port Stanley ,,	NW	sw	NW	NW	NW	C	NW	w	w	w	sw	sw	C	NW	NW
Kincardine, ,,	sw	NW	N	N	N	N	w	s	sw	sw	sw	sw	NE	NW	w
Saugeen, ,,	w	NW	NW	NW	NW	NW	s	sw	sw	sw	sw	w	С	NW	NW
Little Current,,	C			N			C			sw	:		Е		
Fort Carry, Man.	NW	NW	NW	NW	sw	sw	s	w	NE	NW	NW	NW	w	NW	w

Stations.		27t	h Mai	ch.	28t	h Mai	reh.	29t	h Ma	rch.	30t	h Ma	rch.	318	t Mar	ch.
Sydney, N.	s. s	3	w	w	w	s	C	w	w	sw	w	sw	s	w	\mathbf{c}	w
Halifax, ,,	V	v	NW	NW	SE	SE	w	sw	w	w	w	sw	s	w	NW	N
Charl'town, PE	ı,	И	w	w	s	sw	sw	sw	NW	C	s	s	С	С	w	w
Chathan, N.	в	N	w	\mathbf{c}	c	C	3	NW	NW	С	\mathbf{c}	sw	NW	NW	w	w
Father Point,	Q. V	v	w	s	s	w	w	w	sw	sw	sw	sw	sw	w	w	w
Montreal,	,· \	v	sw	w	C	sw	NW	sw	sw	s	w	NW	NW	NE	N	N
Ottawa, Or	ıt. S	w	s	w	w	NW	w	sw	s	s	s	w	w	C	w	N
Kingston, .	, s	\mathbf{w}	$\mathbf{s}\mathbf{w}$	C	C	w	NW	w	sw	sw	w	w	w	NE	C	NE
Toronto,	$, \mid s$	w	w	w	sw	NW	w	sw	w	sw	w	w	N	NW	N	N
Port Dover,	, s	w	$\mathbf{s}\mathbf{w}$	sw	s	w	NW	c	sw	sw	sw	s	N	N	E	NE
Port Stanley,	, N	W	sw	w	w	w	NW	NW	sw	NW	w	w	N	N	N	N
Kincardine,	,	V	w	w	w	NW	NW	sw	sw	sw	w	NW	N	N	N	N
Saugeen,	, s	w	w	NW	NW	NW	NW	E	sw	C	С	NW	ĸw	NE	NW	C
Little Current	,, s	E		•	C			C	١.		w			w		
Fort Garry, Ma	n. N	w	NW	NW	w	NW	s	w	NW	N	NW	NW	NW	s	s	sw

Table B.-- A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time Greenwich ... 7 22 a.m. 0 43 p.m. 4 25 p.m. 5 43 p.m.

Greenwich "		0 4	3 p.n	1.		· 4	3 p.r	11.		4	08 a	.m. (of ne	xt da	y.)
Stations.	22nd	Mar	ch.	23 r c	l Mar	ch.	24t)	n Mar	ch.	25tl	n Mar	ch.	26t1	n Mar	ch,
Sydney, N.S.	0	3	0	13	6	7	9	13	13	15	13	8	11	3	3
Halifax, ,,	5	2	2	2	8	1	4	9	12	6	15	12	8	1	0
Charl'town, PEI.	3	6	0	10	10	4	5	6	16	11	21	4	6	3	2
Chatham, N.B.	0	2	0	0	17	0	15	17	1	1	11	6	9	1	5
Father Point, Q.	0	7	10	8	3	48	40	15	14	9	13	11	8	3	11
Montreal, ,,	11	13	9	13	27	17	10	9	9	30	30	28	18	16	16
Ottawa, Ont.	14	4	22	16	31	10	8	11	1	6	19	14	6	4	20
Kingston, ,,	7	18	29	25	17	2	2	14	4	23	6	15	5	4	13
Toronto, ,,	9	19	31	25	29	15	10	20	14	13	15	7	2	24	18
Port Dover, "	12	24	20	19	19	6	7	13	17	16	16	7	6	17	7
Port Stanley, "	5	7	7	9	9	0	7	8	9	9	3	1	0	12	10
Kincardine, "	12	30	35	.											
Saugeen, ,,	2	20	38	27	19	17	4	11	11	15	16	8	0	25	15
Little Current,	0			15			0			15			10		
Fort Garry, Man.	13	21	8	6	9	3	17	3	14	11	17	3	14	24	18
Stations.	27t	h Mar	ch.	28tl	Mai	ch.	29tl	h Ma	rch.	30t	h Ma	rch.	31s	t Mar	ch.
Sydney, N.S.	2	22	7	4	7	0	8	10	1	4	15	16	9	0	7
Halifax, ,,	12	6	2	1	6	3	4	10	C	9	15	8	4	6	9
Charl'town, PEI.	24	10	10	6	14	2	4	6	0	11	15	0	0	8	8
Chatham, N.B.	19	13	0	0	0	0	10	9	0	0	5	3	13	18	2
Father Point, Q.	32	8	5	4	3	4	22	5	5	8	5	2	5	7	13
Montreal, ,,	6	14	3	0	5	2	4	5	6	7	4	19	14	11	11
Ottawa, Ont.	2	12	9	4	8	19	6	10	4	7	5	11	0	9	2
Kingston, "	7	4	0	0	20	18	4	11	8	7	13	8	10	0	4
Toronto, ,,	3	17	9	5	24	18	11	18	9	10	27	12	9	12	8
Toronto, ,,	ſ	1	i			,	í	į.		i	İ		1 40		12
Port Dover, ,,	6	11	6	8	15	11	0	14	6	7	15	18	10	3	1 ^
		11 6	6	8	15 6	11 2	1	14 6	6	5	15	18	4	6	7
Port Dover, ,,	6		į			1	i		Į	i	ĺ	[İ		1
Port Dover, ,, Port Stanley, ,,	6	6	6	4		1	i	6	7	i	6	4	4	6	1
Port Dover, ,, Port Stanley, ,, Kincardine, ,,	6 2	6	6	4	6	2	1	6	7	5	6	4	4	6	7

1874.

Table A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

Greenwich "

0 43 p.m.

Stations.		lst Ap	ril.	2	nd Ap	ril.	31	d Ar	ril.	4i	ь Ар	ril.	5	h Ar	oril.
Sýdney, N.S	s. NW	NE	C	SE	SE	C	SE	C	w	w	sw	N	w	w	sw
Halifax, ,,	N	sw	s	SE	E	E	SE	sw	sw	w	N	NW	NW	w	sw
Charl'town, PE	. w	c	SE	SE	C	C	c	C	C	sw	C	sw	w	W	sw
Chatham, N.E	. NW	s	C	C	C	C	C	s	sw	w	w	NW	w	w	C
Father Point, C	w	w	w	sw	N	NE	NE	w	NW	NW	NW	w	w	w	sw
Montreal, ,,	N	s	N	N	sw	sw	sw	N	NW	N	w	sw	sw	w	s
Ottawa, Ont	. N	SE	N	C	s	a	w	w	N	w	w	sw	w	s	NE
Kingston, "	E	sw	C	sw	sw	sw	NW	sw	NW	NE	w	w	w	s	SE
Toronto, ,,	NE	E	s	sw	sw	N	sw	w	N	N	w	sw	sw	E	NE
Port Dover, ,,	NE	8	S	s	sw	NW	C	NW	NW	NW	w	sw	s	Ę	N
Port Stanley, ,,	N	sw	w	w	w	NW	NW	NW	NW	NW	NW	w	ន	E	NW
Kincardine, ,,	SE	s	s	s	w	NW	NW	NW	N	s	w	s	s	NE	SE
Saugeen, ,,	NE	C	s	sw	NW	NW	NW	NW	NW	NE	w	sw	SE	SE	NE
Little Current ,,	C			sw			w			w			SE		
Fort Garry, Man	NW	NW	N.	NW	NW	N	N	NW	NW	w	sw	sw	sw	sw	N
Stations.	6t	h Apı	ril.	7t]	h Ap	ril.	8tl	Apı	ril.	9tl	Apr	il.	10t	h Ap	ril.
Sydney; N.S.	sw	sw	w	w	sw	C	C	sw	sw	s.	N	NE	NE	NE	NE
Halifax, ,,	s	₩	w	w	S	C	SE	SE	SE	N	N	NE	E	Æ	NE
Charl'town, PEI.	SE	sw	sw	sw	sw	C	C	\mathbf{c}	C	C	NE	NE	NE	NE	NE
Chatham, N.B.	E	sw	sw	sw	sw	C	Œ	s	C	C	NE	C	NĖ	N	N
Father Point, Q.	s	NE	w	s	s	NE	SE	C	NE	NE	C	s	NE	NE	SE
Montreal, ,,	sw	sw	sw	w	N	N	N	N	N	N	N	\mathbf{s}	sw.	N	N
Ottawa, Ont.	NW	sw	s	sw	NW	w	sw	N	C	N	w	NW	N	w	C
Kingston, ,,	w	w	sw	c	sw	C	C	C	C	NE	E	NE	NE	s	w
Toronto, ,,	w	sw	sw	NW	C	C	E	NE	C	N	SE	C ,	Ŋ	w	C
Port Dover, "	w	s	s	c	s	c	E	N	N	N	NE	NE	NW	w	sw
Port Stanley, "	w	sw	C	c	swj	C	С	E	N	N	NE	NE	NW	sw	sw
Kincardine, ,,	w	w	w	N	N	N	E	N	N	NE	N	N	N	N	N
Saugeen, ,,	sw	sw	sw	N	sw	C	E	N	N	E	N	NE	C	w	W
Little Current ,,	sw			w	.	. ;	s	.	. !	E	. ;	.	w	.	
ort G arry, Man.	NW	NW	w	E	N	N	NW	sw	ws	s	WM	C	NE	Z	Ν.
						18	6								

TABLE B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich ,,

0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

Stations.	1	st A	oril.	21	nd Ar	ril.	3	rd A	pril.	4	th A	pril.	5	th A	pril.
Sydney, N.S	. 4	3	0	8	5	0	3	0	8	13	8	16	25	21	7
Halifax, ,,	6	9	4	11	4	1	4	6	8	5	10	8	10	13	12
Charl'town, PE	. 11	0	1	4	0	0	0	0	0	6	.0	11	21	11	7
Chatham, N.B	. 2	3	0	0	0	0	0	9	15	6	5	11	15	5	0
Father Point, Q	. 5	2	4	7	3	2	1	11	31	25	20	21	15	12	5
Montreal, ,,	12	8	4	3	10	12	11	16	18	10	20	8	14	15	23
Ottawa, Ont	. 4	8	2	0	11,	6	16	13	11	8	22	6	5	7	6
Kingston, ,,	2	1	0	5	3	6	16	13	8	4	12	2	3	5	4
Toronto, ,,	8	5	8	7	14	16	11	18	12	8	23	2	1	13	9
Port Dover, ,,	8	6	7	11	16	14	0	10	14	8	16	14	8	12	7
Port Stanley, ,,	1	2	3	4	4	7	1	6	10	5	6	2	8	6	4
Kincardine, ,,								1 .	.		į .	.	6	10	5
Saugeen, ,,	1	0	2	4	12	17	9	14	13	2	8	1	4	7	1
Little Current ,,	0			4			11		.	21			1		
Fort Garry, Man.	7	23	12	7	14	6	5	4	5	6	2	3	6	6	14
Stations.	6t	h Apı	ril.	7tl	Apr	il.	8t	h Ap	ril.	9t	h Ap	ril.	10	th Ap	ril.
Sydney, N.S.	10	16	14	8	11	0	0	6	4	4	8	6	7	8	13
Halifax, "	23	12	7	1	2	0	1	3	1	4	6	3	11	6	15
Charl'town, PEI.	17	11	5	3	8	0	0	0	0	0	6	0	14	21	17
Chatham, N.B.	3	3	6	8	8	0	9	9	0	0	5	0	9	10	8
Father Point, Q.	4	3	3	6	1	5	3	0	1	. 5	0	1	3	11	
Montreal, ,,	- 9	16	17	15	15	12	16	12	5	16	2	7	17	10	3
Ottawa, Ont.	11	7	9	6	4	11	5	4	0	9	3	4	5	14	0
Zingston, ,,	3	9	5	0	5	0	0	0	0	7	4	3	5	3	6
Coronto, ,,	7	10	6	1	0	0	2	6	0	9	4	0	10	20	0
Port Dover, ,	9	21	2	0	12	0	4	4	8	12	13	8	10	13	5
Port Stanley, ,,	2	4	0	0	2	0	0	1	2	8	3	6	6	3	2
Cincardine, ,,	2	4	5	8	5	3	2	10	8	10	10	2	2	8	5
augeen, "	8	9	12	3	2	0	7	7	2	10	8	1	0	6	1
ittle Current "	9	.		7	.	.	2	.	.	6	.	.	10		
ort Garry, Man.	7	16	10	36	6 !	7	5	4	4	7	7	0	5	12	12

1874.

Table A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

4 25 p.m. 10 50 p.m. Toronto civil time 7 25 a.m. 9 43 p.m. 0 43 ρ.m. 4 08 a.m. (of next day.) Greenwich 11th April. 12th April. 14th April. 15th April. Stations. 13th April. N SE SE w NWNW sw S swsw \mathbf{C} \mathbf{C} N.S. NE SW Sydney, N SW SW N NW NW NWN N swsw SW W SE \mathbf{s} Halifax, Charl'town, PEI. NW NE \mathbf{E} W NW NW NW \mathbf{c} C sw \mathbf{C} \mathbf{C} C swswswSW Chatham, N.B C \mathbf{S} SE NE NWSW SW swswS NW sw NW sw \mathbf{s} S w W W SW Father Point, Q. NE NE NE N . W SW swSW N N N NW NW sw \mathbf{s} S swsw8 N Montreal, \mathbf{s} W NWw W NW S \mathbf{s} \mathbf{C} w w Ottawa, Ont. NW \mathbf{E} SE \mathbf{E} S w N N N N \mathbf{C} SW \mathbf{S} S swS swsw W NW Kingston, w NWNWNW Toronto. NW N N S SW SE \mathbf{E} NE SE SW SW w W NW Port Dover, NW N N S \mathbf{C} E \mathbf{E} \mathbf{E} S \mathbf{s} S \mathbf{S} NW C SW E NW Port Stanley, ,, NW NW NW \mathbf{E} SE \mathbf{E} SE SW SW W N N \mathbf{C} S swW N N Kincardine, N N N S 8 S \mathbf{s} NW NE NW NW SE SE \mathbf{s} $sw \mid sw$ swNW N Saugeen, N N \mathbf{S} Little Current .. N S S N \mathbf{E} seNW NW NE Fort Garry, Man. SE SE SE SE S N N N NW NE 20th April. Stations. 16th April. 17th April. 18th April. 19th April. w swsww N NE w w NWw N NW Sydney. N.S. N W \mathbf{C} N NW sw NE NW sw sw sww NW SE SE Halifax, NW N E Charl'town, PEI W w NW C \mathbf{C} NW \mathbf{c} \mathbf{c} sw swW NW \mathbf{E} \mathbf{E} w w NW NW \mathbf{C} \mathbf{C} \mathbf{C} w NWSE NE Chatham, N.B. NW N \mathbf{S} NWswNW NWNW NW SW Ν W W NWNW N NE NE Father Point, Q. W NW Montreal. SW N N N SW SW SW SW SW NW N NE NE SENW N NE C \mathbf{s} swN NENE Ottawa. Ont. w \mathbf{E} N \mathbf{S} W NENE NE SW swswNE NE W Kingston, N \mathbf{C} NE \mathbf{C} \mathbf{S} sw \mathbf{E} ,, swToronto, NW \mathbf{C} \mathbf{C} NE · NE \mathbf{C} SW \mathbf{C} N SE NE \mathbf{E} NE SEPort Dover. N N N NE N N NW NE NE N \mathbf{S} \mathbf{S} SE NE NW NW Port Stanley, NE NE NE NE C S SE SE NE SENE NE W N Kincardine. \mathbf{E} N \mathbf{E} E N \mathbf{E} S S NWN N SE SE swSaugeen, \mathbf{E} N swsw SW N N \mathbf{E} SE N NE N C \mathbf{C} \mathbf{E} Little Current .. W SW SW NW E NWNW NW Fort Carry, Man. \mathbf{c} SE SE swN NW NW NE

1874.

TABLE B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations.	11	th Apr	il.	12t	h Apı	ril.	13t	h Apı	ril.	14	th Ap	ril.	151	h Apı	·il.
Sydney, N.S.	13	7	3	12	2	17	14	3	3	9	10	10	5	0	0
Halifax, ,,	7	5	14	10	11	10	5	5	2	10	5	1	2	1	5
Charl'town, PEI.	8	9	18	16	23	15	13	0	0	10	0	0	0	0	0
Chatham, N.B.	0	9	2	25	19	11	10	5	7	9	9	4	7	14	1
Father Point, Q.	2	8	39	20	7	12	4	5	4	5	1	6	11	8	1
Montreal, ,,	17	13	16	10	20	10	15	17	5	14	9	10	3	13	20
Ottawa, Ont.	13	22	17	6	10	2	4	9	4	3	6	10	0	22	20
Kingston, ,,	3	14	4	3	2	0	3	6	9	10	19	4	5	9	11
Toronto, ,,	4	30	16	10	5	3	2	10	3	5	8	2	2	22	18
Port Dover, ,,	9	20	15	3	10	0	7	5	2	16	18	15	4	15	18
Port Stanley, ,,	4	6	5	0	3	2	8	5	2	11	3	2	2	6	8
Kincardine, ,,	15	12	8	6	- 5	0	8	10	10	15	10	3	8	21	18
Saugeen, ,,	16	14	1	1	4	4	7	8	15	1.3	14	6	6	20	11
Little Current,,	26			0			6			18			7		
Fort Garry, Man.	12	14	11	15	16	16	4	7	12	12	10	3	3	4	1

Stations.	16	th Ap	ril.	17	th Ap	ril.	18	th Ap	ril.	19	th Ap	ril.	20	th Ap	ril.
Sydney, N.S.	6	15	7	17	9	1	1	1	0	11	21	10	11	5	1
Halifax, "	5	5	8	9	3	14	4	2	3	10	15	2	3	4	9
Charl'town, PEI.	0	12	16	18	0	0	7	0	0	13	14	14	20	4	3
Chatham, N.B.	10	29	13	9	0	0	6	3	0	14	26	14	12	8	2
Father Point, Q.	31	17	42	2	3	1	1	4	5	14	30	23	8	4	6
Montreal, "	13	14	12	15	4	2	20	15	11	2 3	17	13	21	7	10
Ottawa, Ont.	11	8	4	6	8	0	3	14	17	2	10	4	14	16	5
Kingston, ,,	3	0	2	4	7	0	3	8	18	7	4	5	11	7	2
Toronto, ,,	8	0	0	12	5	0	2	8	0	6	3	4	21	7	5
Port Dover, "	8	11	11	10	19	3	3	4	8	3	13	11	14	4	14
Port Stanley, "	4	13	12	7	6	0	2	1	2	2	1	5	4	1	13
Kincardine, "	7	10	4	8	10	4	7	15	13	10	9	12	30	12	19
Saugeen, ,,	1	10	0	7	7	0	8	10	13	4	1.	8	22	1	12
Little Current ,,	4			1			20		٠,	8			26		
Fort Garry, Man.	0	8	8	9	27	29	31	10	2	2	6	3	5	12	2

1874.

Table A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m-

4 25 p.m.

10 50 p.m.

Greenwich 0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

Stations.	21	t Apr	il.	22r	ıd Apı	ril.	231	d Apı	ril.	24t	h Apı	ril.	25t	h Ap	ril.
Sydney, N.S.	E	SE	E	SE	N	w	NW	w	C	N	N	С	w	E	С
Halifax, ,,	E	N	С	NW	NW	NW	NW	w	sw	C	w	w	N	sw	c
Charl'town, PEI.	SE	NE	C	sw	NW	C	W	sw	sw	C	C	sw	NW	NE	NE
Chatham, N.B.	NE	N	C	N	N	NW	w	E	С	C	NW	NW	NW	N	NE
Father Point, Q.	NE	NE	NE	w	w	w	w	NE	C	NE	sw	NW	w	NE	NE
Montreal, ,,	sw	w	w	w	N	s	NW	S	N	N	w	w	s	E	N
Ottawa, Ont.	NW	NW	sw	NW	s	E	NE	c	С	NW	w	C	N	E	NE
Kingston, "	NW	w	C	NW	sw	C	NE	NE	C	N	sw	C	E	c	NE
Toronto, "	NW	w	C	C	s	sw	N	NW	N	N	SE	SE	E	E	NE
Port Dover, ,,	NW	sw	sw	C	s	C	N	C	NW	NE	SE	ŅE	NE	NE	NE
Port Stanley, ,,	NW	sw	w	NW	sw	SE	NW	NW	NW	N	SE	SE	NE	NE	N
Kincardine, "	NW	N	C	s	NW	N	N	N	N	w	N	SE	SE	SE	s
Saugeen, ,,	NW	w	C	sw	N	N	N	NW	C	N	ŊW	E	Ε	SE	SE
Little Current,,	w			SE			NE			sw			SE		
Fort Garry, Man.	W	N	NE	NW	NW	С	sw	sw	S	s	NE	N	NW	N	E
	(-1	974	h Ap	.i)	99	h Apı	-:1	90	th Apr	-:1	20	1. 4	•1
Stations.	261	h Apı	711.	21	at Atp	,11.	401	n Api		20				th Apr	nı.
Sydney, N.S.		in Apr	н. Е	E	N N	w	w	w	w	w	SE	SE	SE.	sw	sw
		- 												 	 I
Sydney, N.S.	E	E		E	N	w	w	w	w	w	SE	SE	SE	sw	sw
Sydney, N.S. Halifax, ,,	E SE	E SE	E SE	E NE	N N	w nw	W NW	w w	w w	w s	SE S	se sw	SE SW	sw sw	sw sw
Sydney, N.S. Halifax, ,, Charl'town, P.F.I.	E SE E	E SE NE	E SE NE	E NE NE	n n nw	w nw	w nw	w w w	w w c	w s c	SE S	SE SW SE	SE SW SE	sw sw sw	sw sw
Sydney, N.S. Halifax, ,, Charl'town,PEI. Chatham, N.B.	E SE E	E SE NE NE	E SE NE NE	E NE NE N	n n nw nw	W NW NW W	w nw nw w	w w w	w w c w	W S C NW	SE S SE N	SE SW SE E	SE SW SE SE	sw sw sw	sw sw c
Sydney, N.S. Halifax, ,, Charl'town,PEI. Chatham, N.B. Father Point, Q.	E SE E E NE NE	E SE NE NE	E SE NE NE NE	E NE NE N	n n nw nw w	w nw nw w w	W NW NW NW	w w w w sw	W W	W S C NW	SE S SE N E	SE SW SE E	SE SW SE SE	sw sw sw s	SW SW C S
Sydney, N.S. Halifax, ,, Charl'town, P.E.I. Chatham, N.B. Father Point, Q. Montreal, ,,	E SE E E NE NE	E SE NE NE NE	E SE NE NE NE	E NE NE N NE	n n nw nw w	W NW NW W	M W W W W W W W	w w w w sw	W W C W NW SW	W S C NW W	SE S SE N E	SE SW SE E	SE SW SE SE NW	sw sw sw s ne	SW SW C S
Sydney, N.S. Halifax, ,, Charl'town,PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont.	E SE E NE NE NE	E SE NE NE NE N	E SE NE NE NE NE	E NE NE N NE NW	N NW NW W SW	W NW W NW NW	NW NW NW	w w w w sw sw	W W C W NW SW	W S C NW W N	SE SE N E N	SE SW SE E E N	SE SW SE SE NW	SW SW SW S NE NE	SW SW C S NE N
Sydney, N.S. Halifax, ,, Charl'town,PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingston, ,,	E SE E NE NE NE	E SE NE NE NE NE NE NE	E SE NE NE NE NE N	E NE NE N NE NW NW	N NW NW W SW NW	W NW NW W NW NW	W NW NW NW NW NE	w w w w sw sw	W W C W NW SW NW C	W S C NW W N	SE SE N E N	SE SW SE E N NW NW	SE SW SE SE NW NW	sw sw sw s ne ne w	SW SW C S NE N W
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingston, ,, Toronto, ,,	E SE E NE NE NE NE NE	E SE NE NE NE N SE NE NE	E SE NE NE NE N N N N N N N N N N N N N	E NE NE N NE NW NW NW	N NW NW W SW NW SW	W NW W NW NW NW	W NW NW NW NW NE NE	W W W W SW NW E	W W C W NW SW C N	W S C NW W N N N N	SE SE N E N NW NW	SE SW SE E N NW NW	SE SW SE SE NW NW	SW SW S NE N W W	SW SW C S NE N W
Sydney, N.S. Halifax, ,, Charl'town,PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingston, ,, Toronto, ,, Port Dover, ,,	E SE E NE NE NE NE NE NE NE	E SE NE NE NE N SE NW NW	E SE NE NE NE N N N N N N N N N N N N N	E NE NE N NE NW NW NW	N NW NW W SW NW SW	W NW W NW NW NW N	W NW NW NW NE NE	W W W W SW NW E SE NE	W C W NW SW C N	W S C NW W N N N	SE SE N E N NW NW NW	SE SW SE E N NW NW W	SE SW SE SE NW NW NW	SW SW SW NE NE W W	SW SW C S NE N W W
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingston, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,,	E SE E NE NE NE NE NE NE NE NE NE NE NW	E SE NE NE NE N SE NW NW	E SE NE NE NE N NE N N N N N N N N N N N	E NE NE N NE NW NW NW NW NW	N NW NW SW NW SW NW NW	W NW W NW NW N NE NW	W NW NW NW NE NE NE	W W W W SW NW E SE NE	W W C W NW SW NW C N	W S C NW W N N N N	SE SE N E N NW NW NW	SE SW SE E N NW NW W C	SE SW SE SE NW NW W W	SW SW SW NE NE W W	SW SW C S NE N W W
Sydney, N.S. Halifax, ,, Charl'town,PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingston, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,, Kincardine, ,,	E SE E NE NE NE NE NE NW NW	E SE NE NE NE N SE NW NW	E SE NE NE NE N NE N NW NW	E NE NE N NE NW NW NW NW NW NW	N NW NW W SW NW SW NW S	W NW W NW NW NW NE NW	W NW NW NW NE NE NE NE	W W W W SW NW E SE NE N N	W W C W NW SW NW C N N NW N	W S C NW W N N N N N	SE S SE N E N NW N NW NW NW	SE SW SE E N NW W W C N	SE SW SE SE E NW NW W W	SW SW SW S NE N W W SW W	SW SW C S NE N W W
Sydney, N.S. Halifax, ,, Charl'town,PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingston, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,, Kincardine, ,, Saugeen, ,,	E SE E NE NE NE NE NW NW NW NW	E SE NE NE NE N SE NW NW	E SE NE NE NE N NE N NW NW	E NE N NE NW NW NW NW NW NW	N NW NW W SW NW SW NW S	W NW W NW NW NW NE NW	W NW NW NW NE NE NE NE NE	W W W W SW NW E SE NE N N	W W C W NW SW NW C N N NW N	W S C NW N N N N N N N N N N N N N N N N N	SE S SE N E N NW N NW NW NW NW NW	SE SW SE E N NW W C N C	SE SW SE SE NW NW NW NW NW NW	SW SW SW S NE N W W SW W	SW SW C S NE N W W W

TABLE B .-- A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Greenwich ,,		V 10	J2.11A				P					(01	110/120	uuj.,	
Stations.	21s	t Apr	il.	22n	d Apr	il.	23r	d Apr	il.	24t	h Apr	il.	25t	h Apri	1.
Sydney, N.S.	8	10	1	6	1	1	10	8	0	1	3	0	6	3	0
Halifax, ,,	14	4	0	4	7	1	3	7	4	0	5	4	5	3	0
Charl'town, PEI.	13	3	0	8	11	0	5	1	2	0	0	3	8	6	2
Chatham, N.B.	5	5	0	16	14	10	7	8	o	0	8	10	6	2	2
Father Point, Q.	16	12	14	7	11	1 3	5	4	0	7	6	12	4	4	8
Montreal, ,,	6	6	8	13	5	7	1	18	9	11	8	10	5	7	5
Ottawa, Ont.	20	20	4	10	2	4	2	0	0	10	2	0	10	2	7
Kingston, ,,	16	10	0	10	4	0	5	6	0	2	4	0	6	0 [5
Toronto, ,,	25	20	0	0	12	1	17	12	17	8	7	. 1	18	12	8
Port Dover, ,,	21	12	8	0	5	0	5	0	8	6	4	4	12	6	13
Port Stanley, ,,	8	4	2	1	2	3	3	8	5	2	4	3	8	3	5
Kincardine, ,,	16	7	0	12	8	10	15	11	2	2	7	15	19	15	5
Saugeen, ,,	. 8	2	0	6	5	2	10	10	0	1	4	8	9	10	4
Little Current ,,	12			6			11	•		7			8	.]	
Fort Garry, Man.	1	7	1	9	16	0	2	5	4	7	5	10	17	10	5
Stations.	261	h Apı	il.	27t	L Apr	il.	28t	h Apr	il.	29t	h Apr	il.	30t	h Apr	11.
Sydney, N.S.	8	19	14	14	12	8	9	12	4	5	1	3	24	17	9
Halifax, ,,	23	40	15	10	12	4	5	7	8	2	15	20	10	20	15
Charl'town, PEI.	14	35	25	21	13	4	14	15	0	0	11	11	16	18	22
Chatham, N.B.	11	18	14	17	13	6	14	12	3	3	9	7	6	22	12
Father Point, Q.	5	16	11	4	11	6	10	12	11	1	11	35	10	11	1
Montreal, ,,	20	18	19	17	17	23	5	3	15	20	23	20	23	8	4
Ottawa, Ont.	8	6	2	17	17	13	12	7	10	14	12	8	26	1 24	14
Kingston, "	7	8	2	3	13	3	3	4	0	6	1 4	5	7	17	4
Toronto, ,,	10	32	26	25	18	7	7	6	16	16	18	10	13	22	10
Port Dover, ,,	8	20	10	12	10	6	13	10	10	12	13	6	9	10	7
Port Stanley, ,,	2	5	5	6	4	6	8	6	5	8	18	0	2	3	1
Kincardine, ,,	18	20	21	12	12	5	12	21	10	10	18	7	10	7	10
	7	23	13	7,	13,		9	12	3	7	13	0	6	4	8
Saugeen, "	•		1		,										
Little Current ,,	16			9;			11			10	₹ .		5 9		

TABLE A .- A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich " 0 43 p.m.

9 43 p.m.

4 08 a.m. (of next day.)

Stations.	1	st Ma	у.	2:	nd Ma	y.	3	rd Ma	у.	4	th Ma	у.	5	th Ma	y.
Sydney, N.S.	sw	s	sw	sw	NE	NE	NE	NE	NW	NW	w	w	w	E	E
Halifax.	sw	sw	w	NW	sw	w	N	N	NW	NW		w	С	sw	s
Charl'town, PEI.	s	C	C	sw	C	C	NW	NW	NW	NW	N	C	w	NE	NE
Chatham, N.B.	s	sw	c	С	N	NE	N	NW	NW	w	N	w	w	w	C
Father Point, Q.	NE	NE	sw	NE	NE	NE	NE	NE	w	w	N	N	NW	l Isw	SW
Montreal, ,,	sw	NW	NW	w	NW	NW	N	E	N	N	sw	w	E	SE	NW
Ottawa, Ont.	w	NW	NW	NW	NW	NW	NW	N	N	С	N	N	N	NW	sw
Kingston, "	w	N	NE	N	sw	NW	N	w	C	NE	c	С	NE	N	NW
Toronto, ,,	w	w	NW	N	sw	N	N	sw	N	NE	NE	N	NE	C	N
Port Dover, ,,	w	w	w	NW	N	N	NE	E	NE	NE	NE	N	N	s	N
Port Stanley, ,,	NW	NW	C	NW	SE	C	NE	SE	SE	E	NE	N	NW	sw	NW
Kincardine, ,,	NW	w	N	N	N	c	N	N	Е	Е	NE	NE	E	N	E
Saugeen, ,,	NW	w	C	N	NW	c	C	N	C	E	Е	C	E	NW	NW
Little Current,,	sw	. ,		NE			NE			NE			SE		
Fort Garry, Man.	E	E	Е	NE	NE	E	E	NE	N	C	c	C	w	NE	SE
Stations.	66	th Ma	у.	7t	h Ma	у.	8t	h Ma	у.	9t	h Ma	у.	10	th Ma	y,
Sydney, N.S.	NE	NE	C	sw	s	sw	ន	s	sw	C	N	c	w	NE	NE
Halifax, ,,	N	s	C	ន	sw	s	s	sw	C	NW	w	sw	NW	NW	NW
Charl'town, PEI.	NE	s	C	C	C	C	c	С	C	C	C	C	С	NW	E
Chatham, N.B.	w	w	NE	C	sw	c	С	E	C	w	sw	sw	NW	NE	C
Father Point, Q.	NW	w	NW	w	NW	sw	С	NE	w	w	NW	w	NW	C	sw
Montreal, ,,	NE	Е	N	NW	sw	sw	N	N	sw	s	Æ	N	NE	NE	N
Ottawa, Ont.	NW	NW	N	sw	sw	w	w	W	NE	SE	C	Е	É	NE	NE
Kingston. ,,	NE	NE	С	w	sw	sw	С	w	C	sw	sw	w	NE	E	NE
Toronto, ,,	N	NW	N	w	S	W	sw	Е	SE	$\mathbf{s}\mathbf{w}$	sw	sw	\mathbf{sw}	sw	w
Port Dover, ,,	NW	N	N	NW	s	S	C	s	s	sw	sw	sw	s	s	s
Port Stanley, ,,	NE	NW	NW	NW	sw	NW	SE	SE	SE	sw	sw	sw	sw	sw	C
Kincardine, ,,	N	N	Е	w	w	w	W	NW	NW	sw	sw	sw	sw	sw	sw
Saugeen, ,,	N	NW	C	w	w	C	С	NW	s	sw	sw	C	sw	w	N
Little Current ,,	NE	•	٠	SW	•	•	E			W			s	•	
Fort Garry, Man.	SE	C	SE	sw	SE	SE	SE	NW	Е	NE	NE	N	NE	SE	N

1874.

TABLE B. - A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Greenwich "		U 48	p.m	•		9 43	p.m.			4 0	8 a.m	. (01	next	day.)
Stations.	1.	st May	7.	2	nd Ms	у.	31	rd Ma	у.	4	th Ma	у.	5	h Ma	у.
Sydney, N.S.	12	9	4	7	2	1	8	10	2	16	15	8	18	8	1
Halifax, ,,	12	9	6	5	4	1	10	12	1	7	5	4	0	10	6
Charl'town, PEI.	19	0	0	10	0	0	13	5	18	13	8	0	1.3	8	8
Chatham, N.B.	11	4	0	0	1	6	17	21	13	14	19	6	13	10	0
Father Point, Q.	7	8	4	7	4	5	4	3	2	1	2	8	7	8	5
Montreal. ,,	10	7	20	12	10	20	18	5	14	20	17	15	10	7	11
Ottawa, Ont.	30	13	6	10	12	3	10	9	4	0	7	3	8	10	2
Kingston, ,,	9	12	4	2	а	4	, 3	7	0,	2	0	Ø	4	5	3
Toronto, ,,	15	36	6	9	1	9	7	4	1	1	7	6	10	0	6
Port Dover, ,,	7	24	6	10	7	4	6	10	7	13	15	4	16	6	10
Port Stanley, ,,	5	6	0	3	3	0	1	1	2	3	3	1	1	3	1
Kincardine, ,,	15	12	7	10	15	0	4	15	10	12	15	6	6	10	1
Saugeen, ,,	14	3	0	4	3	0	0	10	0	10	4	0	7	Ø	1
LittleCurrent, ,,	17			15			10			14			8		
Fort Garry, Man.	9	24	14	6	21	15	14	6	3	0	0	0	3	7	2
Stations.	61	h May	y. `	71	h Ma	у.	81	h Ma	у.	91	h Ma	у.	10	h M	ay.
Sydney, N.S.	9	6	0	8	5	2	9	7	3	0	8	0	4	7	6
Halifax, ,	4	9	0	1	6	1	4	٥	0	6	5	5	. 5	8	9
Charl'town, PEI.	13	9	0	0	0	0	0	0	0	0	0	0	0	14	0
Chatham, N.B.	3	12	3	Q	9	0	0	6	0	2	8	1	1.5	8	0
Father Point, Q.	8	11	15	3	3	4	0	11	2	6	5	2	5	0	2
Montreal, ,,	18	10	18	5	10	13	3	. 3	6	12	3	6	18	10	11
Ottawa, Ont.	14	11	2	2	4	18	7	10	1	2	0	3	6	10	. 4
Kingston, "	8	9	0	3	9	7	0	6	0	5	. 9	13	3	5	9
Toronto, "	9	24	12	6	12	5	1	3	1	12	13	10	7	Ø	3
Port Dover, ,,	9	14	9	4	28	11	0	15	6	18	23	8	11	10	3
Port Stanley, ,,	3	6	2	2	8	1	1	1	3	6	3	1	3	3	9
Kincardine, "	17	19	3	7	7	10	4	4	3	- 15	18	15	10	2	3
Saugeen, ,,	10	11	0	5	5	0	0	2	7	16	13	0	11	2	1
LittleCurrent ,,	13			10			6			9			6	,	,
Fort Garry, Man.	2	0	3	7	8	9	12	8.	14	17	11	5	4	8	11

TABLE A .- A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich " 0 43 p.m. 4 25 p.m. 9 43 p.m.

10 50 p.m.

4 05 s.m. (of next day.)

Stations, 11th May. 12th May. 13th May. 14th May. 15th May. Sydney, N.S. N N W NW N C W SW SW W N NW<
Halifax, "," N NE NE N N N W W SW S NW<
Charl'town, PEI. N 8W C NW SW C SW SW SW NW NW NW N C Chatham, N.B. N W NW W N C SW SW W W NW W W N C N Father Point, Q. NE W SW W NW SW NE W NW W NW NW NW NW C N Montreal, ,, NE SE N S S SW S W NE N NW NW NW NW NW C N C N C SW SW W W NW NW NW C N C N C SW SW W C NE N C N C S C SW SW W C N C N C N C N C N C N C N C S C SW SW W C N C N C N C N C N C N C N C N C N
Chatham, N.B. N W NW W N C SW SW W W NW W N C N Father Point, Q. NE W SW W NW SW NE W NW W NW NW NW NW C N Montreal, ,, NE SE N S S SW S W NE N NW NW NW N NE SE SE N S SW SW W C NE NE C NE NE N S SW SW W C NE NE C NE NE N S SW SW SW W C NE NE C NE E SE NE N S SW SW SW W C NE NE C NE E SE N SW SW SW W C NE NE C NE E SE N SW SW SW NW N SE E E SE N SE SE N SE SE N SW SW NW NW SE NW SE SE N SW SW SW NW NW SE NW SE SE N SW SW SW NW NW SE NW SE SE N SW SW SW NW NW SE NW SE SE N SW SW SW SW NW NW SE NW SE SE N SW SW SW SW SW SW NW NW SE NW SE SE N SW SE SW SW SW SW SW SW SW SW SW SW SW SW SW
Father Point, Q. NE W SW W NW SW NE W NW W NW NW NW NW C N Montreal, ,, NE SE N S S SW S W NE N NW NW N NE SE SE C W SW NW NW NW C E NE NE N Kingston, ,, NE E E E E E NW C S NW N SE E E E E N N SE SE C W SW NW NW SE NW SE SE N N SE SE N SW SW NW NW SE NE N SE SE N SW SW SW NW NW SE NW SE SE N SW SW SW NW NW SE NW SE SE N SE SE N SW SW SW NW NW SE NW SE SE N SE SE N SW SW SW NW NW SE NW SE SE N SE SE N SW SW SW NW NW SE NW SE SE N SIN SE SE N SIN SE SE N SE SE N SIN SE SE SE N SE SE N SE SE N SE SE N SE SE SE N SE SE SE N SE SE N SE SE SE N SE SE SE SE N SE SE SE N SE SE SE SE N SE SE SE SE N SE SE SE SE SE SE SE SE SE SE SE SE SE
Montreal, ,, NE
Ottawa, Ont. NE E NE C S C SW S W NW NW C E NE
Kingston, ,, NE E C S SW SW SW W C NE NE C NE E S TOFONTO, ,, E E E E E NW C S NW N SE E E E B N Port Dover, ,, N N N SE C SW S S N N S NE N SE I Port Stanley, ,, SE SE NW SE SE C W SW NW NW SE NW SE SE N Kincardine, ,, SE SE S S C S S W E E N E N E
Toronto, ,, E E E E E NW C 8 NW N SE E E B N Port Dover, ,, N N N SE C SW S S N N S NE N SE I Port Stanley, ,, SE SE NW SE SE C W SW NW NW SE NW SE SE N Kincardine, ,, SE SE S S C S S W E E N E N E
Port Dover, ", N N N SE C SW S S N N S NE N SE I Port Stanley, ", SE SE NW SE SE C W SW NW NW SE NW SE SE N Kincardine, ", SE SE SE SE SE SE SE NW SE SE N E E N E E N E
Port Stanley, ,, SE SE NW SE SE C W SW NW NW SE NW SE SE N Kincardine, ,, SE SE S S C S S W E E N E E N E
Kincardine, ,, SE SE S S C S S W E E N E E N E
CAN CHE OF OF MAN MAN CAN MAN MAN TO COLOR
Saugeen, "SW SE SE SE NW NW SW NW N E N NE E C I
Little Current ,, SE . SE . W . NE . SE .
Fort Garry, Man. N N NW NW NW NE C E E SE E SE N N N
Stations. 16th May. 17th May. 18th May. 19th May. 20th May.
Sydney, N.S. NW S S SE SW SE C SW C C C C SW SE I
Halifax, ,, SE SE E SW W C N S S S C E S N
Charl'town, PEI. S S SW S C C SW C C S S C SW C C
Chatham, N.B. E SW SW N W C W E C N C SW W SW C
Father Point, Q. E E E S SW SW W NW NE NE NE SW SW C N
Montreal, ,, S S SW SW W NW NE NE NW NW NE S S N SI
Ottawa, Ont C S S W SW NE N C W W W N C S S
Kingston, ,, SW SW SW W S C NE NE NW NW SW W S C N
Toronto, ,, E W W SW SW NW N S C NW SW SW C E N
Port Dover, ,, S W W S SW W W S N W S W SE E W
Port Stanley, SW W C SW W NW NW NW NW NW SE SE SE SE N
Kincardine, "C N W W N N N NW E W W SW NW E
Saugeen, ,, C NW C C N N N NW C W C SW C N C
Little Current,, N C NE C C
Fort Garry, Man. N N NE N E SE SE E NE NW. N NE C C C

15th May.

Stations.

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TABLE B .- A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto bivil time 7 25 a.m. Greenwich

0 43 p.m.

11th May.

4 25 p.m. 9 43 p.m.

13th May.

12th May.

10 50 p.m.

14th May.

4 08 a.m. (of next day.)

1	1		!	- 1				' !		- 1	1		- 1	ı	
Sydney, N.S.	7	6	4	5	6	0	1	6	8	10	7	4	19	10	Q.
Halifax, "	6	8	5	6	4	4	4	6	1	1	6	4	6	8	3
Charl'town, PEI.	6	5	0	3	8	0	3	3	13	10	15	11	14	10	0
Chatham, N.B.	5	13	5	4	4	0	4	9	10	17	18	4	9	8	2
Pather Point, Q.	1	3	1	3	3	1	1	5	4	5	5	6	8	9.	7
Montreal, ,,	10	6	5	12	14	14	3	3	4	10	12	6	5	10	
Ottawa, Ont,	8	8	3	0	8	0	6	3	9	13	5	0	. 5	10	4
Kingston, "	8	7	0	3	1	10	5	9	0	4	7	0	1	2	12
Toronto, ,,	4	14	14	3	11	3	0	2	6	6	6	4	14	8	3
Port Dover, ,,	13	14	12	2	0	6	4	13	14	, 9	4	4	8	4	17
Port Stanley, ,,	1	2	2	2	2	0	1	2	3	3	1	1	1	1	1
Rincardine, "	25	20	271	15	0	3	5	10	7	9	13	10	17	3	
Saugeen, ,,	17	10	14	8	1	2	1	2	2	9	8	4	4	9	7
Little Current,	19		.	6			8		.	13		<i>!</i> •	n		
Port Garry, Man.	7	8	21	9	21	4	0	4	7	8	1	6	3	9	1
				17	th Ma		10	th Ma	_	10	th Ma		26	ch Ma	
Stations.	16	sth M	ъ у .	14	Per Ters	•у.	10	THE PART	·y.	10	One Direct	٠٠٠.	44	ATT: 1425	•y.
		 			1	i			1					- A	1
Sydney, N.S.	1	6	2	1	7	2	0	5	0	0	0	0	9	•	3
Sydney, N.S. Halifax, ,,	1 7	6	2 13	1 10	7	2 0	0 3	5 4	0 2	8	0	0	9	3	3
Sydney, N.S. Halifax, ,, Charl'town, PEI.	1 7 6	6 10 13	2 13 28	1 10 10	7 4 0	0 0	0 3 2	5 4 0	2 0	0 8 11	0 2 11	0	2	3	3 1 0
Sydney, N.S. Halifax, ,, Charl'town, PEL. Chatham, N.B.	1 7 6 2	6 10 13 10	2 13 28 7	1 10 10 4	7 4 0 1	2 0 0	0 3 2	5 4 0 7	0 2 0	8 11 8	0 2 11 0	0 0 8	9 2 6 13	6 3 6 2	3 1 0
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N. B. Pather Point, Q.	1 7 6 2 2 2	6 10 13 10 29	2 13 28 7 27	1 10 10 4 31	7 4 0 1 7	2 0 0 0	0 3 2 4	5 4 0 7 1	0 2 0 5	8 11 8 12	0 2 11 0 8	0 0 8	9 2 6 13	2 0	3 1 0 0
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N. B. Pather Point, Q. Mentreal, ,,	1 7 6 2 2 2 25	6 10 13 10 29 22	2 13 28 7 27 27	1 10 10 4 31 20	7 4 6 1 7	2 0 0 0 0 5 5 5	0 3 2 4 3	5 4 0 7 1	0 2 0 5 18	8 11 8 12 13	0 2 11 0 8 5	0 0 8 9 7	9 2 6 13 11 8	2 0 2 0	3 1 0 2
Sydney, N.S. Hahifax, ,, Charl'town, PEI. Chatham, N. B. Pather Point, Q. Mentreal, ,, Ottawa, Ont.	1 7 6 2 2 2 25 0	6 10 13 10 29 22 8	2 13 28 7 27 30 13	1 10 10 4 31 20 12	7 4 6 1 7 21 5	2 0 0 6 5 5	0 3 2 4 2 2 2 2 8	5 4 0 7 1 19 0	0 2 0 5 18 6	8 11 8 12 13	0 2 11 0 8 5	0 0 8 9 7	2 6 13 11 8	2 0 10 5	3 1 0 2 2
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N. B. Pather Point, Q. Mentreal, ,, Ottawa, Ont. Ringeton, ,,	1 7 6 2 2 25 0 2	6 16 13 10 29 22 8 13	2 13 28 7 27 30 13 16	1 10 10 4 31 20 12 3	7 4 6 1 7 21 5	2 0 0 0 5 5 2	0 3 2 4 2 2 2 2 8 6	5 4 0 7 1 19 0 8	0 2 0 5 18 6 4	8 11 8 12 13 13	0 2 11 0 8 5 8	0 0 8 9 7 5	2 6 13 11 8 0	2 0 10 5	3 1 0 2 2 4 3
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N. B. Pather Point, Q. Mentreal, ,, Ottawa, Ont. Ringeton, ,,	1 7 6 2 2 25 0 2 2	6 10 13 10 29 22 8 13 26	2 13 28 7 27 30 13 16	1 10 10 4 31 20 12 3 1	7 4 0 1 7 21 5 1	2 0 0 6 5 5 2 0 6	0 3 2 4 2 22 8 6	5 4 0 7 1 19 0 8 2	0 2 0 5 18 6 4	8 11 8 12 13 13 8	0 2 11 0 8 5 8 12 7	0 8 9 7 5	9 2 6 13 11 8 0	2 0 10 5 0	3 1 0 2 2 4 3 6
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N. B. Father Point, Q. Mentreal, ,, Ottawa, Ont. Ringston, ,, Toronto, ,, Pert Dover, ,,	1 7 6 2 2 25 0 2 2 6	6 10 13 10 29 22 8 13 26 18	2 13 28 7 27 30 13 16 18 5	1 10 10 4 31 20 12 3 1 4	7 4 0 1 7 21 5 1 5 14	2 0 0 5 5 2 0 6	0 3 2 4 2 22 8 6 20 11	5 4 0 7 1 19 0 8 2	6 5 18 6 4 0 5	8 11 8 12 13 13 8 10 5	0 2 11 0 8 5 8 12 7	0 0 8 9 7 5 2 2	9 2 6 13 11 8 0 1 0 4	2 0 2 0 10 5 0 3	3 1 0 2 2 4 3 6 3
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N. B. Mather Point, Q. Montreal, ,, Ottawa, Ont. Ringeton, ,, Toronto, ,, Pert Dover, ,, Port Stanley, ,,	1 7 6 2 2 25 0 2 2 6 1	6 16 13 10 29 22 8 13 26 18 3	2 13 28 7 27 30 13 16 18 5	1 10 10 4 31 20 12 3 1 4	7 4 6 1 7 21 5 1 5 14 2	2 0 0 5 5 2 0 6 13 6	0 3 2 4 2 2 8 6 20 11 3	5 4 0 7 1 19 0 8 2 15 6	6 6 5 18 6 4 0 5	8 11 8 12 13 13 8 10 5	0 2 11 0 8 5 8 12 7 16 2	0 8 9 7 5 2 2 17	9 2 6 13 11 8 0 1 0 4 3	2 0 10 5 0 3	3 1 0 2 2 4 3 6 3 6
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N. B. Pather Point, Q. Mentreal, ,, Ottawa, Ont. Ringeton, ,, Toronto, ,, Pert Dever, ,, Port Stanley, ,, Rincardine, ,,	1 7 6 2 2 2 2 5 0 2 2 6 1 0	6 10 13 10 29 22 8 13 26 18 3 22	2 13 28 7 27 30 13 16 18 5 0 4	1 10 10 4 31 20 12 3 1 4 2 9	7 4 0 1 7 21 5 1 5 14 21 11	2 0 0 5 5 2 0 6 13 6	0 3 2 4 3 22 8 6 20 11 3	5 4 0 7 1 19 0 8 2 15 6 9	0 2 0 0 5 18 6 4 0 5 1 2	8 11 8 12 13 13 8 10 5	0 2 11 0 8 5 8 12 7 16 2 6	0 8 9 7 5 2 2 17 3 6	9 2 6 13 11 8 0 1 0 4 3 5	2 0 10 5 0 3 3 1 8	3 1 0 2 2 4 3 6 3 6
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N. B. Pather Point, Q. Mentreal, ,, Ottawa, Ont. Ringeton, ,, Toronto, ,, Pert Dover, ,, Port Stanley, ,, Rinoardine, ,, Saugeen, ,,	1 7 6 2 2 2 25 0 2 2 6 1 0 0	6 16 13 10 29 22 8 13 26 18 3 22 14	2 13 28 7 27 30 13 16 18 5	1 10 10 10 4 31 20 12 3 1 4 2 9 0	7 4 6 1 7 21 5 1 5 14 2	2 0 0 6 5 2 0 6 13 6 6	0 3 2 4 22 8 6 6 20 11 3 10 7	5 4 0 7 1 19 0 8 2 15 6	6 6 5 18 6 4 0 5	8 11 8 12 13 13 8 10 5 1 6	0 2 11 0 8 5 8 12 7 16 2	0 8 9 7 5 2 2 17	2 6 13 11 8 0 1 0 4 3 5 0	2 0 10 5 0 3	3 1 0 2 2 4 3 6 3 6
Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N. B. Pather Point, Q. Mentreal, ,, Ottawa, Ont. Ringeton, ,, Toronto, ,, Pert Dever, ,, Port Stanley, ,, Rincardine, ,,	1 7 6 2 2 2 25 0 2 2 6 1 0 0 15	6 10 13 10 29 22 8 13 26 18 3 22	2 13 28 7 27 30 13 16 18 5 0 4	1 10 10 4 31 20 12 3 1 4 2 9	7 4 0 1 7 21 5 1 5 14 21 11	2 0 0 5 5 2 0 6 13 6	0 3 2 4 3 22 8 6 20 11 3	5 4 0 7 1 19 0 8 2 15 6 9	0 2 0 0 5 18 6 4 0 5 1 2	8 11 8 12 13 13 8 10 5	0 2 11 0 8 5 8 12 7 16 2 6	0 0 8 9 7 5 2 2 17 3 6 4	9 2 6 13 11 8 0 1 0 4 3 5	2 0 10 5 0 3 3 1 8	3 1 0 2 2 4 3 6 3 6

1874.

TABLE A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 26 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

10.50 p.m.

4 08 a.m. (of next day.)

Greenwich ,,		V 7	pan	La La Secretaria		J 40	. p.u	•		# U	O N.II	1. (01	пехи	unay.)
Stations.	2	lst M	ву.	22	nd M	ву.	2	3rd M	sy.	2	4th M	ay.	2	5th M	ay.
Sydney N.S.	w	NE	C	sw	sw	sw	√ w	w	sw	w	SE	· c	w	sw	C
Halifax, ,,	N	sw	sw	8	w	w	NW	NW	NW	C	NW	C	SE	8	B
Charl'town, PEL	E	NE	C	8	sw	sw	w	8W	8W	w	C	C	8	SE	SE
Chatham, N.B.	N	NE	NE	N	w	W	w	NW	w	w	NW	C	NW	, N	NE
Father Point, Q.	NE	NB	C	NE	C	w	w	NW	NW	NW	8W	sw	N	E	SE
Montreal, ,,	N	NE	NE	N	N	N	sw	NW	NE	N	SE	N	8	В	8W
Ottawa, Ont.	N	NW	NW	NW	N	N	8	w	w	NE	8	E	NE	8	SW
Kingston, "	NE	N	NW	NW	NW	C	sw	BW	1 C	C	C	lo	SE	sw	SW
Toronto, ,,	N	N	NW	N	N	· N	8W	sw	E	E	E	NE	SE	w.	W
Port Dover, "	NW	NW	w	NW	NW	NW	8	C	C	C	È	0	sw	w	w
Port Stanley, "	NW	NW	NW	NW	NW	C	NE	8E	8E	SE	SE	SE	sw	NW	NW
Kincardine, "	N	NW	E	NW	N	E	w	NW	E	sw	sw	BW	sw.	w.	NW
Saugeen, "	NW	NW	N	w	w	w	sw	C	8E	SE	8	s	sw	w	NA
Little Current,	N			C			w			SE	,		sw		
Fort Garry, Man.	8E	SE	E	8E	N	NW	N	NE	8	NW	N	N	N	E	SE
Stations.	26	th Me	у.	27	th Me	y.	28	th Ma	у.	29	th Ms	у.	30	th M	y.
Sydney, N.S.	SE	s	sw	sw	sw	C	sw	sw	C	N	N	C	w	NE	0
Halifax, ,,	8	sw	sw	sw	BW	w	w	BW	w	NE	8W	E	SE	8	sw
Charl'town, PEL	SE	SE	c	sw	8	вw	sw	sw	NE	N	8E	SE	sw	NE	SE
Chatham, N.B.	SE	в	8	3W	w	w	sw	E	NE	N	NE	C	NE	SE	C
Father Point, Q.	SE	E	E	w	w	sw	sw	NE	N	NE	NE	8w	NE.	NE	NE
Montreal, ,,	sw	sw	w	w	sw	sw	sw	sw	sw	NE	NE	'N	NE	SE	N
Ottawa, Ont.	sw	w	NW	sw	s	ន	С	8	s	NE	c	NW	NE	s	s
Kingston, ,,	w	C	c	sw	8	C	8	C.	C	NE	NE	NE	C	s	sw
Toronto, "	NW	NW	NW	C	SE	C	E	E	N	E	SE	C	w.	8	c
Port Dover, ,,	w	NW	C	SE	в	c	SE	8	c	NW	SE	NE	c	ន	8
Port Stanley, ,,	NW	NW	NW	SE	sw	sw	SE	SE	SE	w	sw	SE	sw	sw	SE
Kincardine, ,,	NW	NW	w	s	8	8	8	sw	NW	c	NW	NW	w	\mathbf{w}	sw
Saugeen, ,,	NW	NW	c	8	sw	C	SE	c	w	NE	w	C	W	W	sw
Little Current ,,	NW		.	SE	.		s	.	.	NE		. !	O		
Fort Garry, Man.			1								1		1		

Table B. A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Toronto civil ti Greenwich "	me		a.m p.m			4 25 9 43	p.m.			4 08) p.m 3 a.m	. (of	next	day.)
Stations.	21	st Ma	у.	22r	nd Ma	y,	23	rd Ma	ay.	24	th Ma	¥y.	251	h Ma	у.
Sydney, N.S.	1	7	0	4	9	9	12	1	6	9	8	0	6	9	0
Halifax, ,.	2	4	1	8	15	9	5	6	6	0	7	0	6	7	4
Charl'town, PEL	4	9	0	15	6	9	8	5	4	3	0	0	5	15	16
Chatham, N.B.	5	4	2	5	2	8	12	15	4	11	2	0	3	5	3
Father Point, Q.	11	2	0	9	0	9	8	10	10	10	3	4	5	29	11
Montreal, ,,	6	5	15	20	14	11	12	8	18	10	6	3	28	88	20
Ottawa, Ont.	6	5	15	16	16	5	3	18	6	6	4	10	7	18	11
Kingston, ,,	5	4	2	9	7	0	1	8	0	0	0	0	13	20	17
Toronto, ,,	5	25	15	11	20	2	2	5	1	5	11	5	4	36	30
Port Dover, ,,	11	19	10	10	14	6	7	•	0	0	1	0	12	22	23
Port Stanley, ,,	3	6	1	3	3	0	1	1	1	1	1	3	6	7	6
Kincardine, ,,	9	10	2	5	5	6	10	3	12	8	3	18	15	29	33
Saugeen, ,,	4	7	5	2	2	1	3	0	8	7	5	14	17	19	9
LittleCurrent, ,,	17	.		0			11			14	•		8		
Fort Garry, Man.	1	3	15	13	10	7	2	1	1	8	8	3	3	9	9
Stations.	261	th Ma	у.	27	th Ma	y.	281	h Ma	y.	29	th Ma	y	30	th Ma	y.
Sydney, N.S.	7	8	2	8	7	0	12	12	0	4	3	0	3	3	0
Halifax, ,,	15	4	1	2	4	2	6	11	5	6	3	2	3	4	1.
Charl'town, PEI.	18	11	0	5	4	8	14	9	13	8	3	 2	3	5	8
Chatham, N.B.	6	6	5	4	2	2	8	4	1	6	6	0	2	2	0
Father Point, Q.	8	4	4	4	4	3	8	6	2	1	3	1	4	1	1
Montreal, ,,	18	21	16	9	18	15	17	14	18	30	9	10	15	6	8
Ottawa, Ont.	10	13	10	4	12	4	0	8	12	8	0	3	3	9	1
Kingston, ,,	7	0	0	1	2	0	3	0	0	5	8	2	0	3	2
Toronto, ,,	17	17	1	0	8	0	1	5	3	6	3	0	2	2	0
Port Dover,	17	11	0	3	4	0	2	10	0	3	5	3	0	9	3
Port Stanley, ,,	6	5	1	1	2	1	1	1	1	2	1	1	1	1	1
Kincardine, "	19	12	5	8	10	8	8	8	30	0	5	6	2	10	8
Saugeen, "	16	4	0	1	6	0	2	0	11	8	5	0	1	5	1
LittleCurrent, ,,	15	. !		4		 	6			11		١. ١	0		
Fort Garry, Man.	4	4	6	9	9	8	14	16	28	25	9	0	15	18	7

TABLE A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich 0 43 p.m. 4 25 p.m. 9 43 p.m.

Stations.	3 1	st Ma	у.	18	t Jun	e	2h	d Jur	æ.	3rc	Jun	a.	4t	h June	ì.
Sydney, N.S.	8	c	C	NE	NE	NE	NE	NE	sw	sw	\mathbf{w}	\mathbf{sw}	\mathbf{sw}	sw	sw
Halifax, ,,	SE	sw	sw	C	N	N	N	Ň	N	sw	sw	w	w	sw	C
Charl'town, PEI.	S	sw	c	N	N	N	N	sw	s	sw	sw	sw	sw	sw	św
Chatham, N.B.	8	C	NE	N	N	N	N	E	SE	w	sw	sw	s	sw	sw
Father Point, Q.	NE	E	NE	NE	N	NW	c	С	w	w	w	sw	sw	sw	ន
Montreal, ,,	w	w	N	N	N	sw	N	sw	sw	s	s	sw	s	ន	8
Ottawa, Ont.	sw	sw	N	NW	NW	N	NW	$\mathbf{s}\mathbf{w}$	s	c	s	S	S	s	\mathbf{c}
Kingston, "	8	c	c	NE	C	С	C	sw	C	C	SE	sw	ន	sw]	\mathbf{C}
Toronto, ,,	8	NW	NW	N	NW	N	C	SE	Ċ	NE	E	s	SE	ន	C
Port Dover, ,,	8	NW	NW	N	NW	NW	N	E	NE	E	Œ	S	sw	ន	s
Port Stanley, ,,	SE	NW	NW	NW	NW	NW	NW	SE	SE	SE	SE	SE	sw	sw	SE
Kincardine, "	W	NW	N	N	N	E	SE	N	SE	SE	w	N	N	N	ន
Saugeen, ,,	₩	NW	N	N	N	N	C	NW	E	SE	sw	NE	C	N	NE
Little Current ,,	sw		•	WK			SE			SE			W		
Fort Garry, Man.	NW	N	C	NE	C	S	S	SE	Е	sw	NW	S	W	NW	NW
Stations.	51	h Jun	е.	6t	h Jur	16,	71	h Jun	е.	8t	h Jun	e.	9	th Jun	e.
Sydney, N.S.	sw	sw	sw	sw	NE	C	sw	SE	C	C	sw	sw	N	N	w
Halifax, ,,	SE	SE	SE	sw	SE	SE	E	SE	SE	s	sw	SW	N	N	N
Charl'town, PEI.	S	s	S	N	NE	NE	Е	E	E	s	c	NW	N	N	N
Chatham, N.B.	sw	s	sw.	NW	SE	NE	N	N	NE	NW	N	N	N	E	N
Father Point, Q.	sw	w	w	NE	NE	NE	C	E	E	\mathbf{E}	NE	NE	NE	NE	NE
Montreal, ,,	s	NW	NE	NÈ	N	N	N	S	N	sw	N	N	SE	N	sw
Ottawa, Ont.	C	w	N	NE	NE	NW	NE	NW	sw	w	NW	C	E	NW	NW
Kingston, "	sw	sw	С	NE	NE	C	C	C	sw	sw	sw	C	O	sw	N
Toronto, ,,	E	NE	N	E	E	E	NE	E	NW	NW	SE	O	0	NW	N
Port Dover, "	S	s	NE	NE	SE	И	SE	sw	NW	NW	NW	O	E	NW	NI
Port Stanley, ,,	sw	SE	C	SE	SE	C	S	sw	NW	NW	SE	C	SE	NW	NV
Kincardine, "	w	NW	E	N	w	s	sw	sw	E	N	N	SE	w	NW	N
Saugeen, ,,	sw	NW	C	C	G	NE	C	w	NW	c	N	N	sw	N] c
Little Current,,	sw			SE	1.		E			C	١.		w	1.	
Fort Garry, Man	w	SE	c	s	E	c	E	N	N	N	N	NE	NE	NE	NI

TABLE B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich " 0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations.		st M	y.	1	st Jur	 10.	2n	d Ju	ne.	81	d Ju	0.	41	h Jus	e.
Sydney, N.S	3	0	0	8	8	9	10	9	1	11	11	8	13	14	10
Halifax, ,,	9	15	4	0	12	6	10	6	3	12	15		9	12	0
Charl'town, PEI.	18	14	0	18	21	16	15	5	9	11	15	18	4	8	13
Chatham, N.B.	5	0	6	11	14	3	4	7	2	7	8	9	18	11	9
Father Point, Q.	1	16	21	15	4	1	0	0	2	2	4	-5	5	, 6	14
Montreal, ,,	12	22	11	15	17	6	7	11	11	9	9	10	11	5	6
Ottawa, Ont.	6	8	10	16	6	3	3	7	5	0	14	5	4	4	0
Kingston, ,,	3	0	0	7	0	0	0	8	0	0	3	14	9	1	0
Toronto, ,,	1	8	13	15	12	12	0	5	0	4	3	1	1	5	0
Port Dover, ,,	4	8	10	16	10	5	6	5	8	4	5	5	5	7	4
Port Stanley, ,,	1	3	12	6	5	4	1	1	1	1	2	2	2	2	1
Kincardine, ,,	5	15	15	20	15	5	2	6	9	10	10	8	2	15	10
Saugeen, ,,	4	4	5	8	7	4	0	3	7	8	1	.3	0	1	5
LittleCurrent, ,,	12			8			6			11			9		
Fort Garry, Man.	4	3	0	1	0	3	5	6	2	7	1	5	10	25	б
Stations.	5t.	h Jun	e\	6t]	h Jun	е,	7t	h Jun	е.	8t	h Jun	ė.	9t	h Jun	θ.
Sydney, NS.	13	13	8	7	5	0	1	7	0	0	8	5	5	4	4
Halifax, ,,	5	7	2	2	3	2	4	6	6	4	5	3	11	8	12
Charl'town, PEI.	7	17	10	13	8	4	4	8	4	14	0	10	17	13	10
Chatham, N.B.	15	14	8	7	10	1	4	5	2	3	8	10	12	9	8
Father Point, Q.	15	11	7	1 .	2	2	0	9	32	29	2 5	24	8	8	5
Montreal, ,,	10	5	2	17	12	9	14	2	2	12	15	8	8	15	2
Ottawa, Ont.	0	15	4 .	10	9	3	5	5	3	20	8	0	3	18	8
Kingston, ,,	2	4	0	2	2	0	0	0	4	6	4	0	0	6	4
Toronto, "	2	4	4	1	10	4	2	1	19	7	6	0	0	17	8
Port Dover "	4	5	6	6	2	6	2	13	10	8	6	0	3	12	3
Port Stanley, ,,	1	2	0	1	2	0	1	1	0	2	2	0	1	5	1
Kincardine, ,,	6	6	3	10	4	14	10	15	3	4	8	7	15	12	7
Saugeen, ,,	1	2	6	0	0	2	0	14	6	0	3	1	12	4	0
LittleCurrent,,,	5			5		.	10			0	.		17		
Fort Garry, Man.	3	4	0	1	2	0	1	1	10	12	10	7	6	12	. 3

1874.

TABLE A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

10 50 p.m. 4 08 a.m. (of next day.)

Stations.	10	th Ju	1e.	11	th Jur	ne.	12	th Ju	16.	13	th Ju	ne.	141	h Jur	10.
Sydne y, N.S .	NE	N	sw	N	.NW	w	w	Е	SE	C	NW	sw	NW	N	c
Halifa x , "	N	N	NW	NW	NW	C	SE	SE	SE	c	NW	w	w	N	c
Charl'town, PEI.	N	C	NW	NW	NW	w	s	sw	sw	sw	NE	NE	N	s	s
Chatham, N.B.	N	sw	w	w	NW	c	N	SE	SE	sw	E	NE	NW	s	sw
Father Point, Q.	E	w	NW	NW	w	N	E	c	NE	w	NE	C	w	w	w
Montreel, ,	NW	N	NE	NE	N	E	S.E	sw	sw	sw	NW	w	w	s	w
Ottawa, Ont.	NW	NW	NW	E	Е	E	E	s	sw	w	w	sw	w	w	NW
Kingston, n	NE	E	NE	NE	NE	NE	#BW	sw	w	w	w	w	w	sw	w
Toronto, "	N	SE	E	NE	E	E	sw	w	w	NW	NW	C	C	С	U
Port Dover, "	NE	Е	NE	NE	N	N	w	w	w	w	w	sw	sw	s	NW
Port Stanley, "	N	SE	NE	E	E	E	sw	w	w	NW	sw	w	C	w	N
Kincardine, "	NE	E	E	SE	SE	SE	s	sw	w	w	\mathbf{sw}	s	w	w	E
Saugeca, "	NE	NE	NE	SE	s	8	sw	w	w	NW	sw	NW	sw	w	C
LittleCurrent.,,	N			E			sw			w			w		
Fort Garry, Man.	E	E	NE	NE	NE	SE	s	SE	SE	s	NE	C	C	SE	c

Stations.	15	th Ju	ae.	16	th Jur	ne.	17	th Jui	1e,	18	h Jur	ie.	19	h Ju	ne.
Sydney, N.S.	w	8	sw	sw	SE	s	SE	SE	E	SE	SE	SE	SE	SE	E
Halifax, ,,	N	Е	s	sw	SE	SE	SE	SE	SE	\mathbf{s}	SE	E	E	E	NE
Charl'town, PEI.	s	Е	s	C	sw	С	sw	SE	SE	Е	Е	E	Е	E	Е
Chatham, N.B.	w	E	N	NE	N	NE	w	SE	SE	N	N	N	N	N	N
Father Point, Q.	sw	С	w	NW	NE	N	NE	sw	NE	N.E	NE	NE	NE	NE	NE
Montreal, ,,	s	sw	w	SE	s	sw	s	sw	w	NW	И	N	NE	NE	NE
Ottawa, Ont.	C	s	s	Е	s	s	s	w	w	w	NW	N	N	E	N
Kingston, ,,	sw	С	C	SE	sw	sw	sw	w	w	NW	N	C	N	NE	C
Toronto, "	C	E	NE	E	sw	sw	NW	NW	w	NW	NW	N	NE	s	NE
Port Dover, ,,	E	E	SE	s	S	ន	w	S	w	NW	NW	C	N	sw	C
Port Stanley, ,,	E	E	SE	SE	sw	w	NW	sw	NW	NW	w	NW	NW	sw	NW
Kincardine, "	SE	SE	SE	sw				N	N	N	N	E	SE	w	SE
Saugeen, ,	s	SE	SE	sw	sw	C	w	NW	С	¢.	С	C	C	C	C
LittleCurrent, "	E	,		SE			w	! ! •		С			sw		
Fort Garry, Man.	SE	SE	SE	s	NW	C	N	s	SE	sw	w	w	W	o	C

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Table 18.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour at various Stations in the Dominion of Canada, at the same absolute times, as follows:
Toronto civil time 7 25 a.m.

Greenwich " 0 43 p.m.

4 25 p.m. 10 50 p.m. 9 43 p.m. 4 08 a.m. (of next day.)

Stations.	100	h Jun	е.	111	h Ju	ıe.	12	h Ju	1e.	130	h Jui	ne.	140	h Jur	10,
Sydney, N.S.	11	6	4	12	14	9	2	6	5	0	1	5	3	7	0
Halifax, ,	6	6	5	8	6	0	6	5	12	0	5	5	3	3	0
Charl'town, PEI.	1 6	0	1	21	15	16	5	8	8	9	8	10	8	5	4
Chatham, N.B.	2	7	13	16	11	0	5	6	5	2	4	1	6	4	2
Father Point, Q.	3	1	7	8	1	1	4	Û	4	2	11	0	2	9	2
Montreal, ,,	8	8	21	18	9	4	9	17	12	16	2	19	22	7	16
Ottawa, Ont.	14	11	5	10	9	10	3	9	10	18	17	5	7	12	6
Kingston, ,,	3	4	3	7	3	2	5	12	13	10	5	4	3	8	4
Toronto, ,,	4	1	7	13	11	5	5	16	18	17	19	0	0	0	0
Port Dover, ,,	8	6	10	10	10	8	9	24	13	16	11	4	3	10	4
Port Stanley, ,,	1	1	2	2	1	1	3	7	6	3	3	2	0	3	1
Kincardine, ,,	11	15	13	35	16	10	15	15	18	12	6	4	7	4	6
Saugèen, ,,	4	4	7	15	10	6	11	7	4	2	8	2	5	1	0
Little Current ,,	10			9			20			14			2		
Fort Garry, Man.	12	10	3	2	5	1	3	8	4	1	1	0	0	4	0

Stations.	15t	h Jun	ie.	16t	h Jur	ie.	170	h Ju	ne.	18	h Ju	ıe.	19	h Ju	ie.
Sydney, N.S.	2	7	3	1	5	1	6	6	2	14	30	20	15	16	10
Halifax, ,,	2	11	2	2	6	2	3	10	15	9	6	11	12	6	4
Charl'town, PEI.	4	8	4	o	9	0	10	16	20	22	16	23	21	19	14
Chatham, N.B.	2	6	2	2	3	2	3	9	5	9	14	14	21	13	9
Father Point, Q.	2	0	2	2	3	1.	2	1	6	20	48	52	16	13	9
Montreal, ,,	5	10	12	2	17	10	8	9	9	18	11	16	12	14	13
Ottawa, Ont.	0	8	2	4	9	3	6	18	13	16	16	7	∗ 8	9	2
Kingston, ,,	1	0	0	ā	\mathbf{s}	7	4	ã	9	7	8	0	6	3	0
Toronto, ,,	0	2	11	1	4	6	16	28	2	14	18	10	7	1	3
Port Dover, "	4	9	6	12	10	9	12	12	4	6	14	0	6	8	0
Port Stanley, ,,	1	2	2	4	1	1	2	2	1	1	4	2	1	2	1
Kincardine, "	12	15	12	10				8	14	. 3	8	3	4	3	3
Saugeen, ,,	6	13	8	8	7	0	6	2	0	0	0	0	0	0	0
Little Current ,,	3			9			15			0			1		
Fort Garry, Man.	4	2	4	6	6	0	4	15	12	11	14	3	8	16	0

1874.

Table A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m. 10 50 p.m.

4 08 a.m. (of next day.)

Stations.	20	th Ju	ne.	21	st Jur	e.	22	nd Ju	ne.	28	d Ju	10.	24	th Ju	ne.
Sydney, N.S.	E	NE	NE	NE	N	C	C	w	c	w	sw	sw	w	w	nw
Halifax, "	NE	SE	SE	s	E	c	s	SE	c	S	sw	s	NW	NW	NW
Charl'town, PEI.	NE	NE	c	C	NE	C	E	sw	S	sw	s	ន	w	NW	w
Chatham, N.R.	N	N	N	N	E	E	SE	SE	sw	sw	sw	C	w	NW	NW
Father Point, Q.	NE	NE	N	NW	NE	NW	w	N	s	sw	sw	N	NW	NW	N
Montreal, ,,	NE	N	N	N	NW	sw	sw	sw	sw	w	sw	N	NW	N	w
Ottawa, Ont.	E	SE	sw	NW	NW	S	s	s	sw	ន	NW	N	w	w	w
Kingston, "	NE	NE	E	E	sw	c	sw	sw	sw	sw	sw	C	NE	sw	C
Toronto, "	E	E	E	E	s	c	sw	w	w	w	NW	N	NE	sw	sw
Port Dover, "	N	SE	NE	NE	s	c	С	8	w	w	្ង ន	NW	NE	E	C
Port Stanley, "	E	SE	E	E	SE	C	SE	sw	w	sw	w	NW	NE	SE	w
Kincardine, ,,	w	N	SE	S	Ŵ	SE	s	S	S	sw	w	NW	E	E	E
Saugeen, ,,	C	C	NW	s	C	C	sw	sw	sw	sw	C	C	E	N	N
Little Current,,	C			E			C			w	 •		NE		
Fort Garry, Man.	SE	s	SE.	S	SE	S	w	NE	NE	E	E	SE	SE	S	w
Stations.	25	th Ju	1e.	26	th Ju	ne.	27	th Ju	ne,	28	th Ju	ne.	29	th Ju	ne.
Sydney, N.S.	w	w	c	sw	NW	E	w	sw	s	sw	c	NE	 NW	NE	c
Halifax, ,,	NW	N	N	w	SE	C	sw	sw	sw	sw	w	NW	E	SE	SE
Charl'town, PEI.	w	w	sw	NW	N	sw	sw	sw	sw	sw	NE	sw	E	SE	SE
Chatham, N.B.	sw	w	NW	NM	w	С	c	w	c	C	N	E	C	NE	E
Father Point, Q.	NW	NE	s	w	N	S	sw	w	w	C	NE	NE	s	s	SE
Montreal, ,,	w	sw	w	NE	sw	sw	sw	sw	sw	sw	sw	NW	N	sw	sw
Ottawa, Ont.	w	C	w	N	sw	C	w	S	sw	sw	8	Е	s	w	w
Kingston, ,,	C	C	C	NE	NE	С	С	sw	sw	8	w	C	sw	sw	w
Toronto, ,,	sw	C	С	NE	NE	E	N	SE	SE	8	sw	sw	w	w	NW
Port Dover, ,,	C	w	sw	w	NW	N	С	s	s	S	s	ន	w	S	NW
Port Stanley, ,,	E	NW	w	W	NW	N	NW	sw	E	E	sw	w	ŃW	sw	NW
Kincardine, "	S	S	S	N	N	N							,		
Saugeen, ,,	sw	sw	c	O	NE	С	NW	sw	C	sw	sw	sw	sw	sw	NW
Little Current,,	E			N			w			SE			w		
Fort Garry Man.	N	N	C	NE	NW	N	E	N	N	N	N	N	N	NE	NE

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TABLE B.—A Supplement to Tables I and II. shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto eivil time 7 25 s.m. Greenwich ,

0 43 p.m.

4 25 p.m. 9 43 p.m.

10 50 p.m.

4 08 a.m. (of next day.)

Greenwich "						ұ.ш.			4 U	о а. ш	. (01	HOAV	uay.	/ = >	
Stations.	20t	h Jur	10.	21	ıt Ju	ne.	22	nd Ju	ne.	23	rd Ju	ae.	24	th Ju	
Sydney, N.S.	7	4	1	2	1	0	0	1	0	7	13	11	6	17	9
Halifax, ,,	4	4	1	2	4	0	4	6	0	1	4	5	9	9	2
Charl'town, PEI.	13	8	0	0	4	0	1	7	6	8	9	8	16	19	4
Chatham, N.B.	12	8	4	3	2	2	1	2	1	5	9	0	16	16	7
Father Point, Q.	8	7	3	1	2	1	1	1	1	2	3	33	13	10	8
Montreal, ,,	14	4	12	4	2	13	27	10	17	20	14	23	15	2	10
Ottawa, Ont.	8	6	1	2	4	4	6	9	7	6	21	18	14	13	8
Kingston, "	6	3	2	2	3	0	3	6	4	2	2	0	10	6	0
Toronto, "	10	10	2	2	1	0	1	9	7	12	18	8	13	7	3
Port Dover, ,,	10	3	3	4	5	0	0	12	8	7	5	6	6	4	0
Port Stanley, ,,	1	1	1	9		.	6	!	2	6	1	3	6	13	1
Kincardine, "	3	2	5	12	5	6	10	8	13	11	6	2	15	12	17
Saugeen, ,,	0	0	3	3	0	0	8	7	4	15	0	0	9	5	2
Little Current,,	0			2			0			8		.	10		
Fort Garry, Man.	8	10	7	17	10	8	6	5	2	12	20	16	8	10	2
Stations.	250	h Jur	10,	26	th Ju	ne.	27	th Ju	ne.	28	th Ju	ne.	29	th Ju	ne.
Sydney, N.S.	8	2	0	5	9	2	12	10	2	5	0	2	2	6	0
Halifax, ,,	5	6	3	6	7	0	1	3	8	10	1	4	9	10	10
Charl'town, PEI.	12	8	3	14	8	3	6	6	10	9	6	2	5	11	12
Chatham, N.B.	7	8	9	14	10	0	0	6	0	0	1	1	0	1	2
Father Point, Q.	5	3	2	5	1	5	4	10	2	0	1	1	6	4	2
Montreal, ,,	10	20	21	2	10	9	10	11	20	13	10	14	2	20	7
Ottawa, Cnt.	10	0	2	7	5	0	4	7	4	9	14	4	4	16	9
Kingston, ,,	0	0	0	2	2	.0	0	3	2	3	1	0	5	12	7
Toronto, ,			l	ł	ļ	١.	١.	١ .	1 _	6				00	8
	3	0	0	5	7	0	4	6	, 1	סן	15	2	14	22	_
Por Dover, ,	3 0	0 6	6	7	7 12	9	0	5	6	6	12	5	12	16	9
Port Dover, ,,	_		-	Ì	•	ı					ĺ				_
	0	6	6	7	12	9	0	5	6	6	12	5	12	16	9
Fort Stanley, ,,	0 9	6 9	6	7	12 21	9	0	6	6	6	12 9	5 9	12 11	16 16	9
Fort Stanley, ,, Kincardine, ,	0 9 1)	6 9 6	6 9 6	7 1 5	12 21 9	9 3 4	0 3	6	6 9	6	12 9	5 9	12 11	16 16	9 3

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There A.-A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich . 0 43 p.m.

4 25 p.m. 9 43 p.m.

Groonwich ,		0 10	Р.ш.			, io	P.111.			1 00	4.111.	· lor	11020	aay.,	
Stations	30	th Jun	ie,	1.8	t July		2n	d Jul	۲۰.	3:	rd Jul	у	4	th Jul	у.
Sydney, N.S.	s W	SE	SE	Е	NE	w	w	w	C	NW	s	C	E	NE	N
lialifax, ,,	5E	NE	N	s	NE	Е	s	SE	sw	s	E	Е	NE	s	C
Caseltown, PEL	SE	SE	Е	E	NE	E	C	s	S	s	SE	SE	SE	Е	Е
Chatham, N.B.	sE	NW	NE	NE	N	NW	NE	NW	C	ន	SE	C	c	Е	С
Father Point, Q.	sw	sw	w	E	Е	NE	s	Е	N	E	Е	E	C	E	NE
Montreal, ,,	sw	NW	w	ន	sw	s	NE	N	N	sw	S	NW	s	E	N
Ottawa, Out.	W	w	c	sw	w	8	NE	sw	w	w	w	NW	ន	В	N
Kingston, "	sw	sw	C	C	sw	C	s	sw	C	NW	sw	c	Е	NE	NE
Toronto, ,,	N	ន	N	С	E	NE	N	NW	C	NW	s	sw	E	NE	N
Port Dover, "	NW	ន	NW	NW	s	N	nw	NW	NW	NW	ន	N	s	N	NW
Port Stanley, "	NW	w	N	E	E	w	NW	NW	NW	NW	sw	SE	sw	NW	NW
Kincardine, ,,) •			B	E	NW	NW	Е	w	8	ន	w	N	N.
Saugeen, .,	NW	w	w	S	sw	C	c	N	C	NW	w	s	C	N	C
Little Current,,	w			s			N			N			Е		
Fort Garry, Man.	E	E	E	N	E	s	s	s	SE	NW	NW	C	8	SE	w
Stations.	51	h Jul	у.	61	h Jul	y.	7	th Jul	y.	8t	h Jul	у.	9	th Jul	у.
Sydney, N.S	NW	NE	c	NE	NW	C	sw	sw	B	s	sw	sw	w	NW	8
Halifax, ,,	sw	Е	E	N	NE	w	w	S	S	s	sw	C	sw	NW	NW
Charl town, PEI.	E	NE	E	NE	s	B	sw	ន	s	s	sw	sw	w	N	sw
Chatham, N.B.	c	С	NE	C	sw	c	ន	s	s	sw	NW	sw	w	\mathbf{w}	w
Father Point, Q.	s	NW	s	c	NE	sw	sw	sw	sw	\mathbf{sw}	sw	w	w	w	c
Montreal, ,,	NE	N	C	s	S	sw	sw	sw	sw	sw	ŝ	N	N	s	sw
Ottawa, Ont.	N	E	\mathbf{s}	C	s	Е	sw	s	C	w	w	N	N	sw	N
Kingston, "	NE	E	C	sw	sw	sw	sw	w	sw	w	sw	C	NE	E	C
Toronto, ,,	N	s	sw	sw	ន	C	sw	c	C	NW	s	w	NE	E	NE
Port Dover, ,,	N	s	w	s	s	B	SE	s	SE	\mathbf{s}	s	NW	N	E	NW
Port Stanley, .,	NW	sw	E	E	E	E	SE	w	N	NW	sw	NE	NW	SE	NE
Kincardine, ,,	NW	NW	E	s	w	SE	s	w	SE	N	N	N	SE	N	Е
Saugeen, ,,	1	l		sw	sw	w	SE	sw	C	c	NW	С	NE	N	C
0 , ,,	C	NW	N	1914	15"	} ''	10.13	12.11			. ~ 1 11 1	C 1		10	_
Little Current,,	C	NW	. N	W	.	. "	S			w			s		
<i>, ,</i> ,,	c		W		w	NW	s	N	NE	i i	SE		1		NW

Table B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute

times, as follows:
Toronto civil time 7 25 a.m.
Greenwich 0 43 p.m.

4 25 p.m.

Greenwich ,,				l.		9 43	p.m.			4 08	a.m	. (of	next	day.)
Stations.	301	th Jur	ie.	18	July		2	nd Jul	у.	31	rd Jul	у.	41	th J ul	у.
Sydney, N.S.	5	9	7	8	4	1	3	6	. 0	1	5	0	8	5	1
Halifax, ,,	12	6	2	1	6	4	- 5	6	2	6	6	6	1	4	0,
Charl'town, PEI.	15	14	8	5	9	3	0	3	3	8	11	8	4	5	4.
Chatham, N.B.	8	2	1	4	4	3	1	5	0	1	1	0	0	1	0.
Father Point, Q.	8	3	4	١ 5	9	3	2	8	1	2	2	2	0	8	5
Montreal, ,,	17	3	10	3	6	9	13	17	9	9	2	7	6	7	13
Ottawa, Ont.	13	24	0	4	6	4	6	3	8	18	8	4	2	4	8.
Kingston, ,,	1	10	0	0	1	0	2	7	0	2	6	0	. 1	2	14
Toronto, ,,	.10	6	- 3	0	5	6	5	16	0	3	11	7	8	5	11
Port Dover, "	10	8	4	5	5	4	9	16	7	6	14	3	4	13	15
Port Stanley ,,	6	12	2	5	6	4	8	16	4	4	10	8	3	12.	12
Kincardine, "	`•				15	6	8	14	5	3	12	18	7	15	٠,
Saugeen, ,,	5	5	1	4	7	0	0	2	0	2	0	9	0	4	0,
Little Current ,,	12			5		.	12			9			12	,	
Fort Garry, Man.	6	19	6	5	8	2	14	8	10	9	11	0	4	21	6
Stations,	51	h Jul	у.	6	th Jul	у.	7	th Ju	y.	8	th Ju	y.	9	th Jul	у.
0.1			•	ا ،										۱ .	_

Stations.	51	h Jul	у.	61	th Jul	у.	7	th Jul	y	- 8	th Jul	у.	9	th Jul	у.
Sydney, N.S.	4	1	0	6	2	0	11	6	8	10	9	8	8	8	1
Halifax, ,,	2	9	6	4	1	10	5	6	3	. 6	9	,0	. 1	9	1
Charl'town, PEI.	5	5	2	7	8	7	10	23	15	14	8	5	- 12	9	5
Chatham, N.B.	0	0	1	0	1	0	10	16	10	4	5	8	14	13	1
Father Point, Q.	1	1	1	0	1	5	6	6	12	7	6	6	5	4	. 0
Montreal, ,,	16	10	0	5	11	11	15	15	12	9	5	12	12	4	8
Ottawa, Ont.	4	6	4	0	12	1	4	4	0	3	16	6	6	3	6
Kingston, ,,	11	8	0	2	8	3	2	1	7	7	5	0	8	1	0
Toronto, ,,	15	7	2	5	6	0	1	0	0	2	2	2	9	7	5
Port Dover, ,,	14	14	4	3	9	4	3	8	3	6	8	5	8	5	7
Port Stanley,	2	4	2	2	2	2	6	11	5	12	9	9	8	7	5
Kincardine, ,,	3	2	6	12	8	8	10	2	1	5	6	1	4	7	4
Saugeen, ,,	0	2	1	7	6	1	4	4	0	0	4	0	1	2	ប
Little Current,,	.0			2			7			9			14		
Fort Garry, Man.	19	26	6	8	8	6	6	6	6	9	6	16	5	16	7

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TABLE A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Statious in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Greenwich "	" V 45 p.m.						43 p.	ш,			UO M	,	or nez		
Stations.	10	h Jul	у.	11	th Ju	ly.	-15	th Ju	ly.	134	h Ju	y.	14	th Ju	ly.
Sydney, N.S.	NW	SE	c	ន	8w	c	NW	w	s	sw	s	c	sw	sw	C
Halifax, "	NW	sw	s	sw	8W	w	N	ន	ន	SE	8	8W	S	s₩	NW
Charl'town, PEI.	sw	ន	s	s	s	ន	w	SE	s	s	S	8	8	8W	8W
Chatham, N.B.	W	SE	c	C	sw	C	w	C	C	C	NE	8W	sw	w	SW
Father Point, Q.	sw	E	sw	C	w	\mathbf{w}	w	w	C	иw	C	NE	C	W	W
Montreal,	NE	ន	8w	sw	N	N	NE	NE	8E	8	N₩	sw	w	sw	SW
Ottawa, Unt.	NE	SE	SE	NW	N	N	NE	E	NE	C	W	S	W	w.	8
Kingston, ,,	С	B	C	8w	NE	NE	NE	NĘ	NE	8W	sw	C	sw	sw	O
Toronto, ,,	NE	8	NW	nw	N	C	NE	E	N	NW	w	w	c	8	SW
Port Dover, ,,	NW	SE	C	N	NE	N	NE	NE	NE	sw	s	C	ន	8	8
Port Stanley, ,,	NE	E	Е	NW	N	NE	NE	NE	N	sw	8W	SE	sw	SW	3₩
Kincardine, ,,	8	N	N	NE	N	C	E	NE	w	w	sw	sw	sw	8	8
Saugeen, ,,	sw	NW	N	N	N	С	NE	NE	C	C	w	С	sw	s₩	8W
Little Current,,	C	• '		NE			E			W			NW		•
Fort Garry, Man.	N	NW	NW	8W	8	8	SE	SE	NW	NW	NW	SE	E	W	NW
POID CHAISY, MEAN.	1 74	24.14	1 11 11	10.	1 5		1013	1 1012	24 44		24 11	512	1 42	, "	
Stations.	•	ith Ju	 		th Jul	<u> </u>		th Ja			th Ju			th Ju	
	•	<u> </u>	 			<u> </u>		_==			-				
Stations.	14	sw	ly.	19	th Jul	y. I	17	tak Jed	y.	16	th Ju	ły.	16	th Ja	ly.
Stations. Sydney, N.S.	w	sw	by.	19 8W	sw	y. C	17 E	C C	y.	W	eth Ju	dy.	0	th Ju	ly.
Stations. Sydney, N.S. Halifax, ,,	W NW 8W	sw sw	sw sw	8W W	sw sw	y. C	E C	C NE N	σ σ	W	E BE	dy. C	0 8	s sw	c sw
Stations. Sydney, N.S. Halifar, ,, Charl'town, PEI.	W NW 8W	SW SW SW	sw sw sw	8W W 8W	sw sw sw	y. C C SW	E C	C NE N	у. С	W NW C	E BE C	O N S	0 8 8	S SW 8	ly. C SW
Stations. Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N.B.	W NW 8W	SW SW SW SW	sw sw sw sw	8W W 8W 8W	sw sw sw w	y. C C SW	E C C NW	C NE N E	g. G G G	W NW C	E SE C SE	O N S C	0 8 8 8 8	SW SW	ly. C SW S
Stations. Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q.	W NW 8W 8W	SW SW SW SW S	sw sw sw sw	SW W SW SW	sw sw sw w	y. C SW N C	E C C NW S	C NE N E	g. G G G G	W NW C C	E SE C SE SW	o N S C	O S SW SW W	SW SW SW	ly. C SW S SW
Stations. Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,,	W NW SW C	SW SW SW SW S	sw sw sw sw s	8W W 8W 8W W SW	sw sw w w w	y. C SW N C NW	E C C NW S	C NE N E C SW	g. G G G W	W NW C C C SW	E SE SW SW	o N S C W	O S SW SW W	SW SW SW SW	y. O SW S SW S SW
Stations. Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont.	W NW SW C S	SW SW SW SW S S	sw sw sw sw sw sw	SW SW SW W	sw sw sw w w w	y. C SW N C NW	E C C NW S W C	C NE N E C SW	g. C C C W SW	W NW C C C SW	E SE C SE SW SW S	y. O N S C W SW SE	SW SW S C	SW SW SW SW SW	SW SW SW SW SW
Stations. Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingsten, ,,	W NW SW C S S	SW SW SW SW S SW SW	SW SW SW SW SW C	SW SW SW W SW W	sw sw sw w w w	y. C SW N C NW N C	E C C NW S M C C	C NE N E C SW S	g. C C C W SW	W NW C C C SW S	E SE SW SW S	y. O N S C W SW SE C	C S SW SW S S S S S S S S S S S S S S S	SW SW SW SW	SW SW SW SW SW SW
Stations. Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingsten, ,, Toropto, ,,	W NW SW C S S	SW SW S S SW SW SW SW	SW SW SW SW SW C	SW W SW W W W W W W W W W W W W W W W W	SW SW SW W W W W NW	y. C SW N C NW N N C NW	E C C NW S M C C C	C NE N E C SW S	g C C C W SW C C	W NW C C C SW S S	E SE SW SW S C S	y. O N S C W SW C C C	SW SW S C S S	SW SW SW SW SW	SW SW SW SW SW SW
Stations. Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingston, ,, Toronto, ,, Port Dover, ,,	W NW 8W C S S SW SW	SW SW S S SW SW SW SW SW	SW SW SW SW SW C NW SW	8W 8W 8W 8W W SW W NW NW	SW SW SW W W W W NW NW	y. C SW N C NW N C NW W	E C C NW S W C C C N	C NE C SW S SW S	o c c c w sw c c s	W NW C C SW S S	E SE SW SW S C S SW	y. C N S C W SW C C C	SW SW S S S S	SW SW SW SW SW SW	SW S SW S SW S
Stations. Sydney, N.S. Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingsten, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,,	W NW 8W C S S SW SW SW	SW SW SW SW S SW SW SW SW SW	SW SW SW C NW SW SW	8W W 8W SW W SW W NW NW	sw sw w w w w nw nw	y. C SW N C NW N W NW	E C C NW S W C C C N N N	C NE N E C SW S SW SW SW SW	C C C W SW C C S NW	W NW C C S S S S S E	E SE SW SW S C S SW E	N SW SE C C C E	OSSWWWSCSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS	SW SW SW SW SW SW SW	SW SW SW SW SW SW SW
Stations. Sydney, N.S. Halifar, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingsten, ,, Toronte, ,, Port Dever, ,, Port Stanley, ,, Kincardine, ,,	W NW 8W C S S SW SW SW	SW SW SW SW S SW SW SW SW SW SW	SW SW SW SW SW C NW SW SW SW	8W W 8W SW W SW W NW NW	SW SW W W NW NW NW N	y. C C SW N C NW N C NW N L	E C C NW S W C C C N N SE	C NE C SW S SW SW SW S	C C C W SW C C S NW S	W NW C C SW S S SW S S SW	E SE SW SW S C S SW E S	by. C N S C W SW C C C C S	OSSWWWSCCSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS	SW SW SW SW SW SW SW SW SW SW SW SW SW S	SW SW SW SW SW SW SW SW SW SW SW SW SW S

TABLE B .- A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich

4 25 p.m.

10 50 p.m.

4 08 a.m. (of next day.) 0 43 p.m. 9 43 p.m.

Stations.	10	th Ju	ly.	11	th Ju	ly.	12	th Ju	ly.	13	th Ju	y.	14	t h Ju	ly.
Sydney, N.S.	4	6	0	9	8	0	7	3	2	5	4	0	6	8	0
Halifax, ,,	1	15	4	4	5	3	7	5	4	9	7	3	10	3	3
Charl'town, PEI.	1	6	3	11	4	6	11	6	3	.8	4	3	14	6	4
Chatham, N.S.	3	4	0	0	4	0	5	0	0	0	2	7	10	8	5
Father Point, Q.	1	3	2	0	9	1	5	2	0	1	0	1	0	5	3
Montreal, ,,	2	5	7	10	13	15	14	15	4	4	5	19	14	7	16
Ottawa, Ont.	4	4	4	8	11	5	8	6	6	0	10	12	4	2	4
Kingston, "	0	1	0	1	2	5	15	10	4	3	7	0	3	2	0
Toronto, "	3	7	3	7	8	0	8	4	7	8	7	1	0	8	3
Port Dover, "	6	6	0	6	10	10	10	18	14	8	11	0	2	9	8
Port Stanley, "	1	6	1	4	7	9	7	13	в	4	3	1	3	2	3
Kincardine, "	6	11	16	15	15	0	11	. 2	2	1	7	7	4	15	18
Saugeen, "	4	1	2	10	3	0	3	2	0	0	9	0	5	7	12
Little Current ,,	0			9			3			6		,	5		
Fort Garry, Man.	4	4	4	5	17	11	13	7	11	4	8	8	11	28	34
Stations.	15	th Ju	ly.	16	th Ju	ly.	17	th Ju	ly.	18	th Ju	ly.	19	th Ju	ly.
Sydney, N.S.	6	4	6	8	10	0	2	0	0	1	6	0	0	3	0
Halifax, ,,	1	14	3	8	6	0	0	6	0	1	8	1	2	6	3
Charl'town, PEI.	4	12	12	6	9	5	0	3	0	0	0	3	8	3	8
Chatham, N.B.	13	2	13	6	5	6	3	2	0	0	5	0	4	6	10
Father Point, Q.	0	3	5	5	3	0	1	0	0	0	3	3	1	5	19
Montreal, ,,	10	15	19	6	3	19	3	4	13	7	6	9	10	5	10
Ottawa, ,,	10	14	6	8	14	6	0	2	2	4	7	3	0	16	12
Kingston, "	3	15	0	10	4	0	0	3	0	4	0	0	2	4	14
Toponto, "	10	10	10	17	11	2	0	4	0	2	7	0	2	18	5
Port Dover, ,	8	16	15	11	11	6	4	5	3	2	6	0	11	10	11
Port Stanley, ,,	12	24	22	12	15	3	1	4	1	4	6	4	6	7	15
	مدا	15	15	25	10	6	9	6	7	7	11	8	21	16	13
Kincardine, "	18		l				ľ	١.		ا ہا	_			L	ا م
Kincardine, ,, Baugeen, ,,	10	4	4	6	8	0	2	0	1	5	7	0	1	14	0
		l	4	6 10	8	0 :	0		1	5			27	14	

Table A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m. 10 50 p.m. 4 08 a.m. (of next day.)

20th July. 21st July. 22nd July. 23rd July. 24th July. Stations. N.S. SW sw sw swsw sw \mathbf{N} NW \mathbf{s} NW \mathbf{SE} C sww 8 Sydney, 8 8 SW sw N N N C SE 8 SE \mathbf{C} S 8 8 Halifax. Charl'town, PEI. \mathbf{S} 8Wlsw w \mathbf{E} swswN \mathbf{C} \mathbf{C} \mathbf{S} \mathbf{C} \mathbf{S} S 8Ww NW sw NE NW \mathbf{C} swswswsw Chatham, N.B. \mathbf{C} NW \mathbf{C} \mathbf{C} w sww W w W \mathbf{S} Father Point, Q. w 8 8 8 sw. SW NW SW swswswS swsw \mathbf{E} N sw \mathbf{S} \mathbf{s} Montreal, \mathbf{C} w w NW S \mathbf{C} NW NW \mathbf{C} \mathbf{s} \mathbf{C} \mathbf{s} N 8 \mathbf{c} Ont. Ottawa, \mathbf{c} \mathbf{C} \mathbf{C} \mathbf{C} \mathbf{c} \mathbf{C} \mathbf{E} \mathbf{C} \mathbf{C} 8 ន SW \mathbf{c} 8 Kingston, N N \mathbf{N} NW N N N 8 \mathbf{c} \mathbf{C} SE \mathbf{E} E \mathbf{E} \mathbf{c} Toronto. \mathbf{s} w 8 Ν \mathbf{C} S C \mathbf{s} NW NW NW N N \mathbf{C} \mathbf{E} Port Dover, sw NW sw E w \mathbf{E} E SE SE Ν N \mathbf{E} SE Port Stanley, ,, NW w SE sw \mathbf{s} \mathbf{g} \mathbf{s} S \mathbf{s} w SE 8 8 NE N Kincardine, ٠. \mathbf{c} \mathbf{C} NW \mathbf{C} \mathbf{C} C \mathbf{c} swi sw | sw8 w W NE ! NW Saugeen, N w W swE Little Current,, s E \mathbf{E} С S S w swFort Garry, Man. SW w SE \mathbf{s} N NWNW

Stations.	251	h Jul	y.	261	h Jul	у	271	h Jul	у	286	h Jul	у.	291	h July	7.
Sydney, N.S.	sw	w	sw	sw	sw	sw	sw	sw	sw	sw	sw	sw	sw	sw	sw
Halifax, ,,	w	sw	w	sw	sw	w	sw	SE	SE	SE	sw	С	N	sw	sw
Charl'town, PEI	sw	sw	sw	sw	sw	sw	ន	ន	ន	s	N	NE	C	s	ន
Chatham, N.B.	sw	sw	sw	sw	s	s	sw	s	s	C	N	С	N	N	E
Father Point, Q.	w	NW	S	s	s	s	w	NE	c	N	NE	C	NE	NE	NE
Montreal, ,,	s	SE	s	\mathbf{s}	s	s	s	NE	N	N	NE	N	N	N	NW
Ottawa, Ont.	SE	ន	s	ន	s	ន	N	N	E	NE	C	N	w	N	NW
Kingston, ,,	s	sw	s	sw	8	w	NE	NE	С	E	NE	C	N	N	C
Toronto, ,,	s	s	s	s	S₩	w	N	N	N	N	Е	NW	N	N	NW
Port Dover, "	s	s	s	ន	s	NW	NW	N	N	NE	N	NW	NW	N	NW
Port Stanley, "	w	E	sw	NW	sw	NW	NW	NW	NW	NE	NB	NW	NW	w	NW
Kincardine, "	S	s	s	s	NW	N	N	N	N	NE	N	N	1,7	W	C
Saugeen, "	\mathbf{s}	sw	sw	SE	NW	N	NE	NE	C	C	N	N	0	N	C
Little Current ,,	SE			s			N]]		N			N		
Fort Garry, Man.	N	N	N	NW	NW	NW	sw	SE	s	C	N	C	E	SE	SE

TABLE B.—A Supplement to Tables I and II., shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Greenwich ,,		7 40 1	7,111,									<u>`</u>			-
Stations.	20t	h July.		21st	July		22n	l July	.	23r	d July	<u>'-</u> -	24t	h July	·.
Sydney, N.S.	8	7	8.	7	3	3	4	8	2	3	4	0	2	10	1
Halifax,	4	6	4	4	4	2	3	6	0	1	5	6	0 1	7	4
Charl'town, PEI.	16	10	8	4	3	2	5	8	0	0	3	0	10	4	3
Chatham, N.B.	7	0	2	0	4	0	9	9	4	0	10	5	7	6	0
Father Point, Q.	20	1	3	3	2	5	4	1	1	4	5	4	2	2	2
Montreal, ,,	5	7	10	4	9	11	10	8	10	17	19	6	5	14	7
Ottawa, Ont.	14	9	0	2	12	4	0	6	8	0	12	4	0	7	0
Kingston, ,,	0	0	0	0	0	0	2	0	0	7	1	0	3	0	8
Toronto, ,,	11	6	8	8	11	3	2	6	0	0	6	4	2	11	0
Port Dover, ,,	10	5	9	10	11	4	5	7	4	0	5	0	. 0	10	4
Port Stanley, ,,	6	6	12	6	9	3	1	4	3	4	1	4	7	1	12
Kincardine, ,,	14	13	5	3	3	5	2	.	5	5	- 8	6	5	5	5
Saugeen, "	5	8	0	0	2	0	. 0	0	0	2	5	1	4	1	3
Little Current ,,	13			8	.		8		·	17			5	-	•
Fort Garry, Man	5	3	0	8	8	12	19	10	9.	3	4	8	15	4	3
Stations.	25	th July	y.	26	th Ju	ý.	27	th Ju	ly,	28	th Ju	ly.	29	th Ju	y.
		1					11	9	4	12	8	2	4	3	5
Sydney, N.S.	5	10	1	3	9	2		. 8	3	2	8	0	1	7	2
Halifax, ,,	2	9	2	2	8	3	4		5	8	15	4	Ô	2	4
Charl'town, PEI.	6	3	11	11	10	8	18	11	4	0	1	0	3	2	3
Chatham, N.B.	5	8	5	10	15	8	11	10	. 0	1	3	0	1	1	7
Father Point, Q.	2	2	5	4	8	14	5		10	9	14	14	5	12	5
Montreal, ,,	15	15	17	17	21	9	5	10	4	10	0	2	8	5	10
Ottawa, Ont.	}	10	8	10	19	4	10	8	0	13	6	0	2	1	10
Kingston, ,,	5	11	2 8	20	15	6	11	3	3	6	5	11	10	8	9
Toronto, ,,	4	10	3	6	12	15	14	7	6	7	8	4	8	5	
Port Dover, ,,	4	5	6	14	18	6	122	11	1	1	6	2	6	12	6
Port Stanley, ,,	9	3	9	9	6	8	6	6	8	8	14	8	3	5	. 0
Kincardine, "	13	14	9	23	12	18	12	15		1	1		į.	1	
Saugeen, ,,	1		1	9	11	5	5	14	0	0	6	1	0	5	
Little Current ,,	6	1		10		'	10		_	e		. 0	6		1.
Fort Garry, Man	. 10	12	4	12	10	2	3	12	5	0	6	1 0	1 0	1	6

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Table A.—A Supplement to Tables I. and II., showing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 6 43 p.m.

4 25 p.m. 9 43 p.m.

G. I	1 0	ne t		Net July.		1		4.26	l a			7	,//a4/m,	ALC SOME	
Stations.	-	oth J	uy.	- 3	18t 7 t	ily.	18	t Aug	USĘ.	20	d Aug	UST.	- 3r	d Aug	ust,
Sydney, N.S	. s	sw	sw	NW	sw	C	SE	SE	BW	s	8W	\$W	sw	w	sw
Halifax, ,,	w	sw	NW	N	sw	C	s	s	sw	sw	S	C	N	w	W
Charl town, PEI	. s	C	sw	sw	sw	sw	8	S	s	sw	sw	C	NW	NW	C
Chatham, N.B	. s	NW	sw	sw	SE	sw	s	s	sw	sw	NW	NW	W	N	w
Father Point, Q	. w	sw	sw	s	E	SE	S	s	s	W	W	W	W	sw	w
Montreal, ,,	N	C	w	s	B	sw	sw	NW	NW	w	NW	NW	w	NW	NW
Ottawa, Ont.	ď	W	s	SE	sw	sw	w	W	w	NW	NW	W	w	w	w
Kingston, ,,	NE	sw	sw	sw	w	w	W	N	C	N	NW	Ŋ	N	C	C
Toronto, ,,	NW	s	s	w	w	sw	w	W	NW	NW	NW	wk	N	w	N
Port Dover, ,,	INW	s	ន	w	s	s	w	NW	NW	NW	W	NW	NW	s	N
Port Stanley, ,,	W	w	sw	SW	NW	w	W	NW	NW	NW	NW	NW	NW	N	NW
Kincardine, ,,	SE	sw	s	w	w	s	N	N	NW	NW	Ŋ	E	SE	S	S
Saugeen, "	N	sw	ន	w	sw	NW	NW	NW	C	N	NW	O.	C	NW	G
Little Current "	C		.	w			NW	•		NW			NW		. •.
Fort Garry, Man.	\$E	W	w	w	NW	WK	NW	N	N	N,	E	NE	E	E	SE
Stations.	46	Augu	et.	5tb	Aug	æt.	60	Augu	ıs t .	761	Aug	ust.	8til	i Augu	ist.
													-	A PROPERTY OF	
Sydney, N.S.	w	w	s	w	NE	NE	E	E	N	w	w	sw	s	sw	s
Sydney, N.S. Halifax,	w	w w	s C	w	NE C	NE NE	E NE	E	N NW	W NW	w sw	sw	s s	sw sw	s s
77 116	! "						1 7	**		1.	974				
Halifax, ,,	w sw	w	С	N	C	NE	NE	N	₩W	NW	sw	C	s	sw	S
Halifax, ,, Charl'town, PEI.	w sw	w sw	c c	N N	C N	NE NE	NE NE	N	ne ne	NW SW	sw sw	c sw	s sw	sw s	8
Halifax, ,, Charl'town, PEI. Chatham, N.B.	w sw sw	w sw w	C C NW	N N N	C N N	NE NE N	NE NE N	N N N	MM NE	NW SW SW	sw sw	C SW	s sw sw	sw s sw	8 8
Halifax, ,, Charl'town,PEI. Chatham, N.B. Father Point, Q.	sw sw w	w sw w	C C NW S	N N O	C N N E	NE NE N SW	NE NE N W	N N N W	NE NW SW	NW SW SW W	sw sw sw	EW SW S	s sw sw	sw s sw e	8 8 0
Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,,	sw sw w w	w sw w w	C C NW S W	N N O	C N N E W	NE NE N SW	NE NE N W	N N W W	NE NW SW	NW SW SW	sw sw sw s	c sw sw s	S SW SW S	SW SW E C	8 0 0
Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, ,,	w sw sw w w	w sw w w	C C NW S W N	N N O O	C N E W	NE NE N SW W	NE NE N W C	N N W W	NW NE NW SW S	NW SW W S	SW SW SW S	SW SW S SW B	S SW SW S	sw sw E C	8 0 0 0
Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, ,, Kingston, ,,	sw sw w w	w sw w w w sw	C C NW S W N	N N O C C	C N N E W NW C	NE NE N SW W N	NE NE N W C N	N N W W	NW NE NW SW S C	NW SW W S C S	sw sw sw s s s	SW SW SW SW SW	S SW S S S NE C	SW SW E C E	8 0 C C C
Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, ,, Kingston, ,, Toronto, ,,	w sw sw w w w	w sw w w w sw	C C MW S W N C W	N N O C C NE	C N N E W NW C S	NE NE SW W N C	NE NE N O SW N	N N W W W	NW NE NW SW S C E	NW SW SW S S S S	SW SW SW S S SW	SW SW S SW SW E SW	S SW SW S S NE C	SW SW E C E SW W	s s c c c
Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, ,, Kingston, ,, Toronto, ,, Port Dover, ,,	w sw sw w w w	w sw w w w sw sw	C C MW S W N C W C	N N O C NE N C	C N N E W NW C S C	NE NE NE NE NE NE NE NE NE NE NE NE NE N	NE NE N C SW N	N N W W SW E S	NW NE NW SW S C E C	NW SW S C S N S	sw sw sw s s s sw sw s	SW SW SW SW NW NW	S SW SW S S NE C W	SW SW E C E SW W	S S C C C C W
Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, ,, Kingston, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,,	SW SW W W W N N	W SW W W W SW SW SW	C C MW S W C W C NW	N N C NE NE	C N N E W NW C S C E	NE NE SW N C S C NE	NE NE N O N O N S W N N N E	N N W W \$W E S	NW NE NW SW S C E C	NW SW S C S NE	SW SW W S S SW N SE SW	SW SW SW SW SW NW NW	S SW SW S NE C W N	SW SW E C E SW W S	S C C W W NW
Halifax, ,, Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, ,, Kingston, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,, Kincardine, ,,	w sw sw w w w nw n	W SW W W SW SW SW S	C C NW S W C W C NW E	N N O C NE N C NE S	C N N E W C S C E E	NE NE N C S C C C C	NE NE N O N O N S N N N N N S S E	N N W W SW E SE N	NW NE NW SW S C E C	NW SW S S S S NE S NE S	SW SW S S S SW N SE SW S	SW SW SW SW SW SW SW SW SW SW SW SW SW S	S SW SW S NE C W N	SW SW E C E SW W S NW	S S C C W NW NW E

1874.

Table B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour at various Stations in the Dominion of Canada, at the same absolute times, as follows:
Toronto civil time 7 25 a.m.

Greenwich " 0 43 p.m. 4 25 p.m. 9 43 p.m.

Stations.	301	h Jul	y.	31s	t Jul	y	lst	Augu	st.	2nd	Augu	st.	3rd	Augu	st.
Sydney, N.S.	6	9	8	8	1	0	8	7	3	12	8	2	7	12	3
Halifax, ,,	4	3	5	2	5	0	7	8	15	9	4	0	2	2	10
Charl'town, PEI.	11	0	8	6	5	12	17	11	28	13	5	0	13	6	0
Chatham, N.B.	5	8	5	2	5	7	10	8	9	10	1	5	4	2	5
Father Point, Q.	2	2	8	1	3	5	16	9	3	7	8	2	3	5	6
Montreal, ,,	9	0	17	5	20	1.2	18	17	13	7	12	15	15	13	19
Ottawa, Ont.	0	8	8	4	16	7	8	10	6	13	9	12	13	12	6
Kingston, ,,	3	7	2	18	20	14	13	1	0	2	4	2	4	0	0
Toronto, "	5	14	6	18	19	8	9	15	11	14	18	2	10	13	8
Port Dover, ,,	4	7	13	17	7	13	6	15	10	8	7	4	7	10	6
Port Stanley, ,,	6	2	10	21	8	15	6	14	8	9	15	3	3	14	5
Kincardine, ,,	5	10	15	10	6	20	15	8	3	10	10	1	2	3	2
Saugeen, ,,	4	11	9	9	5	4	2	1	0	5	14	0	0	11	0
LittleCurrent ,,	0			18			8			15			9	.	١.
Fort Garry, Man.	4	13	7	18	6	-5	4	4	2	4	_ 2	7	4	7	7

Stations.	Stations. 4th August.		st.	5th August.			6th	Augu	st.	7th	Augu	ist.	8th August.		
Sydney, N.S.	9	10	2	3	5	2	8	18	5	13	9	7	8	12	5
Halifax, ,,	5	8	0	2	0	4	6	20	6	7	14	0	2	7	2
Charl'town, PEI.	11	6	0	5	9	8	14	18	16	9	8	8	4	14	13
Chatham, N.B.	7	12	6	3	6	3	7	8	2	4	9	2	7	12	0
Father Point, Q.	10	3	1	0	3	2	1	1	2	1	7	4	2	1	0
Montreal, ,,	18	2	2	0	4	2	0	4	10	12	10	14	1	0	0
Ottawa, Ont.	4	10	4	0	4	4	3	2	4	0	8	1	4	2	O _P
Kingston, ,,	2	8	0	1	0	0	3	1	0	3	1	4	0	3	0
Toronto, ,,	8	6	2	2	7	3	2	8	3	1	1	2	5	5,	3
Port Dover, ,,	6	11	0	0	0	0	6	6	0	6	4	6	6	13	6
Port Stanley, "	9	17	5	2	1	2	1	6	3	2	6	3	2	18	6
Kincardine, "	2	6	1	4	3	0	2	5	0	1	5	2	5	2	2
Saugeen, ,,	0	5	0	O	0	0	2	0	0	0	1	0	1	1	0
LittleCurrent "	0			e			G			0			11	ļ .	
Fort Garry, Man.	4	17	3	0	4	3	5	11	2	3	14	4	10	12	5

TABLE A .-- A Supplement to Tables I and 1I, shewing the Direction of the Wind at various Stations in the Dominion of Canada at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m. 10 50 p.m. 4 08 a.m. (of next day.) Greenwich 0 43 p.m.

Greenwich ,	, 0 45 p.m. 9 45 p.m.							р.ш. 4 08 а.ш. (ог						next day.)			
Stations.	9tl	Augu	ıst.	10t)	Aug	ust.	11tl	a Aug	ust.	12tl	Aug	ast.	13th August.				
Sydney, N.S.	8	8	SE	E	8	sw	w	w	sw	sw	sw	sw	sw	NE	NE		
Halifax, "	8	SE	8	8	S	8	NW	sw	sw	8	8	s l	8	S	E		
Charl'town, PEL	8	o	8	SE	E	C	w	s	С	sw	8W	sw	sw	NE	E		
Chatham, N.B.	sw	8	c	NE	N	N	sw	sw	C	sw	8	8	E	NE	C		
Father Point, Q.	8	NE	o	C	E	NE	С	sw	8	sw	sw	NW	NE	w	NW		
Montreal, ,,	Е	SE	w	w	sw	w	sw	sw	8	8	SE	N	NE	E	NE		
Ottawa, Ont.	C	sw	w	C	w	8	ន	8	8	8	N	NW	N	N	N		
Kingston, "	NE	sw	w	a	C	C	8	α,	G	8	o	N	N	N	C		
Teronte, "	w	8	sw	W	8	E	NE	SE	E	8W	NW	NW	N	s	N		
Port Dover, ,,	NW	sw	w	8	SE	C	8	E	C	8	NW	N	N	SE	N		
Port Stanley, "	NW	sw	w	w	sw	W	E	E	E	sw	NW	NW	N	E	NW		
Kincardine, "	С	w	w	w	N.	SE	ន	8	8	sw	N	N	NE	N	N		
Baugeen, ,,	\mathbf{c}	NW	С	c	N	C	N	C	8	BW	NW	N	NE	N	C		
LittleCurrent "	Ŵ	i		w		•	SE			w		•	N	!	•		
Fort Garry, Man.	N	w	w	C	SE	N	NE	N	N	N	N	C	σ	SE	C		
Stations.	14tl	Augu	st.	15tl	Aug	ast.	16t	h A.ug	ast.	17t	h Aug	ust.	18t	h Aug	ust.		
Sydney, N.S.	E	E	σ	E	NE	NE	N	NE	SE	s	sw	sw	sw	sw	wa		
Halifax, "	E	SE	NE	NE	N	N	NW	NW	NW	8	sw	sw	s	sw	w		
Charl'town, PEI.	SE	С	C	C	N	C	σ	o	C	C	sw	8	8	w	sw		
Chatham, N.B.	N	NE	σ	NW	NE	C	w	C	c	sw	s	sw	sw	sw	sw		
Father Point, Q.	i					I	,	0		DW.	1 3	5W	13 11		1		
Tacher I ome, &.	NW	NE	sw	C	С	С	sw	sw	c	sw	S	SW	sw	sw	sw		
Montreal, ,,	NW NE	NE NE	sw o	c c	й.М С	C W	sw E	ĺ	_				1 1	sw	sw N		
	-				i T	i -		sw	c	sw	ន	s	sw	sw	i .		
Montreal, ,,	NE	NE	O	c	ŅW	w	E	sw sw	C S	sw s	S	s sw	sw Nw	sw nw nw	N		
Montreal, ,, Ottawa, Ont.	NE N	NE SE	o c	o c	NW NE	W	E NW	sw sw E	C S N	sw s	s s	s sw sw	sw nw nw	SW NW NW SW	N NW		
Montreal, ,, Ottawa, Ont. Kingston, ,,	NE N NE	NE SE NE	o c c	0 0 0	NW NE SW	W N C	E NW C	sw sw E	C S N C	sw s s	s s s sw	s sw sw	SW NW NW	SW NW NW SW	N NW C		
Montreal, ,, Ottawa, Ont. Kingston, ,, Toronto, ,,	NE N ME NW	NE SE NE S	0 0 0	c c o w	NW NE SW SW	W N C NW	E NW C N	sw E s	S N C E	sw s sw c	s s sw sw	s sw sw s	SW NW NW NW	SW NW NW SW	N C NW		
Montreal, ,, Ottawa, Ont. Kingston, ,, Toronto, ,, Port Dover, ,,	NE N ME NW NW	NE SE NE S	C C C NW	C C O W NW	NE SW SW S	W N C NW C	E NW C N	SW E S SE	C S N C E C	sw s sw C sw	s s sw sw	s sw sw s w	SW NW NW NW	SW NW NW SW NW B	N NW C NW		
Montreal, ,, Ottawa, Ont. Kingsten, ,, Toronto, ,, Port Dover, ,, Port Stanley ,.	NE N NE NW NW NE	NE SE NE S E	C C NW	C C W NW	NW NE SW SW S	W N C NW C	E NW C N	SW SW E S SE SE S	S N C E C N	sw s sw c sw sw	s s sw sw sw s	s sw sw s w s	SW NW NW NW NW	SW NW SW NW B	N NW C NW N		
Montreal, ,, Ottawa, Ont. Kingston, ,, Toronto, ,, Port Dover, ,, Port Stanley ,, Kincardine, ,,	NE NW NW NE E	NE SE NE S E W	C C NW NW NE	C C O W NW NW	NW NE SW SW S SW	W N C NW C NW	E NW C N C	SW E S SE SW W	C S N C C N C	sw s sw C sw sw	s s sw sw sw s	S SW SW S W S	SW NW NW NW N N	SW NW SW NW B	N NW C NW N		

18th August.

2

1874.

Table B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

10th August.

2 8 8

2 1 3

0 10

1

Toronto civil time Greenwich "

Stations.

Charl'town, PEI

IN.S.

Sydney,

Halifax.

7 25 a.m. 0 43 p.m.

2 1

9th August,

8

2 1

0 | 8

10

3

13

4 25 p.m. 9 43 p.m.

11th August.

8

4 1

3 |

10 50 p.m. 4 07 a.m. (of next day.)

15

3 1 3

12

12th August.

8

Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingston, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,, Kincardine, ,, Sangeen, ,, Little Current ,, Fort Garry, Man.	2 1 1 0 1 13 3 3 0 0 5	1 1 6 4 18 13 17 9 7	0 8 4 1 7 5 5	6 0 1 0 4 6 8 3	9 3 7 4 0 8 8	7 5 15 4 0; 1 0	1 0 5 2 1 4 3	9 6 2 10 0 10 4	0 7 9 4 0	8 4 12 2 3 15 7	15 10 8 4 0 19	10 3 5 12 6 10 5	8 8 16 8 8 11	2 8 8 9 9 5	0 1 14 6 0 9
Montreal, ,, Ottawa, Ont. Kingston, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,, Kincardine, ,, Sangeen, ,, Little Current ,, Fort Garry, Man.	1 0 1 13 3 0 0 5	1 6 4 18 13 17 9 7	8 4 1 7 5 5	1 0 0 4 6 8	7 4 0 8 8 6	15 4 0; 1 0	5 2 1 4 3	2 10 0 10 4	9 4 0 2	12 3 15 7	8 4 0 19	5 12 6 10	16 8 8 11	8 9 9	14 6 0 9
Ottawa, Ont. Kingston, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,, Kincardine, ,, Sangeen, ,, Little Current ,, Fort Garry, Man.	0 1 13 3 0 0 5	6 4 18 13 17 9 7	4 1 7 5 5	0 0 4 6 8	4 0 8 8 6	4 0: 1 0	2 1 4 3	10 0 10 4	4 0 2	2 15 7	4 0 19	12 6 10	8 8 11	9 9 5	6 0 9
Kingston, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,, Kincardine, ,, Sangeen, ,, Little Current ,, Fort Garry, Man.	1 13 3 0 0 5	4 18 13 17 9 7	1 7 5 5	0 4 6 8	0 8 8 6	0; 1 0 1	1 4 3	0 10 4	0 2	15 7	0 19	6 10	8 11	9 5	0
Toronto, ,, Port Dover, ,, Port Stanley, ,, Kincardine, ,, Sangeen, ,, Little Current ,, Fort Garry, Man.	13 3 0 0 5	18 13 17 9 7	1 7 5 5	4 6 8	8 8 6 2	1 0 1	4	10	29	7	19	10	11	5	9
Port Dover, ,, Port Stanley, ,, Kincardine, ,, Sangeen, ,, Little Current ,, Fort Garry, Man.	3 3 0 0 5	13 17 9 7	7 5 5 0	6 8 3	8 6 2	0 1	3	4	0					- 1	
Port Stanley, ,, Kincardine, ,, Sangeen, ,, Little Current ,, Fort Garry, Man.	3 0 0 5	17 9 7	5 5 0	8	6	1		_		7	12	5	7	5	4
Kincardine, ,, Sangeen, ,, Little Current ,, Fort Garry, Man.	0 0 5	9	5 0	3	2		9	17							
Sangeen, ,, Little Current ,, Fort Garry, Man.	0 5 1	7	0		-	2			8	8	11	4	6	5	3
Little Current ,, Fort Garry, Man.	5 1			0	,		2	10	15	10	20	10	в	20	5
Fort Garry, Man.	1		. 1		3	0	5	0	5	8	13	5	1	8	0
		10		8	•		8			15			5		
Stations.		10	5	0	4	12	12	18	15	6	9	0	0	3	0
	14tl	Aug	ust.	st. 15th August.				Aug	ust,	17t	h Aug	ust.	18tl	Aug	ust.
Sydney, N.S.	4	3	0	1	1	3	8	4	1	9	10	10	12	5	8
Halifax, ,,	6	4	2	2	6	3	2	3	1	6	5	3	3	6	4
Charl'town, PEI.	3	0	0	0	1	0	0	0	0	0	8	13	19	в	5
Chatham, N.B.	6	2	0	2	2	ø	7	0	0	4	1.5	9	10	ø	11
Father Point, Q.	1	1	1	0	0	0	1	1	0	7	7	13	6	10	4
Montreal, "	10	2	.0	0	8	в	3	1	12	8	6	14	7	11	10
Ottawa, Ont.	5	3	0	0	8	3	5	8	1	3	15	7	13	14	4
Kingston, "	9	5	0	0	3	0	0	2	0	9	6	8	10	7	0
Toronto, ,,	3	7	0	2	7	5	3	8	2	0	14	3	7	9	1
Port Dover, "	9	6	4	6	12	0	0	10	0	12	9	4	5	16	8
Port Stanley, ,,	9	õ	2	5	15	4	2	12	3	3	6	2	8	11	2
Kincardine, "	5	9	2	3	10	4	1	1	0	8	22	10	2	6	3
Saugeen, "	0	5	0	0	5	0	0	2	2	0	14	0	4	0	1
Little Current ,,	0			0		,	5			15	.]		4		
Fort Garry, Man	0	5	10	11	1	7	2	3	1	13	7	6	8	õ	2
						21	3					······································	· Married Lange W	***	

TABLE A.—A Snpplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time	7	25	a.m.
Greenwich	0	43	n m

4 25 p.m. 9 43 p.m.

Stations.	19th August. 20				th August.			21st August.			l Aug	ust.	23rd August.			
Sydney, N.S.	N	N	s	sw	SE	s	w	w	C	sw	N	SE	w	w	sw	
Halifax, "	NW	NW	N	sw	sw	w	NW	NW	NW	NW	N	NW	NW	sw	w	
Charl'town, PEI	NW	w	o	sw	sw	c	w	c	a	NW	NW	w	w	sw	C	
Chatham, N.B.	w	σ	sw	sw	s	σ	w	w	NW	w	NW	w	w	U	C	
Father Point, Q.	w	sw	sw	sw	sw	sw	w	w	w	w	w	w	w	w	w	
Montreal, ,,	w	s	sw	w	N	NW	w	w	N	N	N	NW	SE	w	w	
Ottawa, Ont.	SE	sw	Е	sw	NW	NW	w	S	NW	NM	w	N	N	w	NW	
Kingston, ,,	C	s	s	sw	sw	NE	C	Ė	NE	NE	NE	C	NE	O	c	
Toronto, "	w	SE	\mathbf{s}	w	w	c ·	NE	NE	N	N	SE	w	N	E	N	
Port Dover, ,,	N	SE	\mathbf{s}	sw	W	NW	NE	Е	NE	N	NE	NE	NE	NE	NE	
Port Stanley, ,,	Е	Е	w	w	NW	N	Е	Е	NE	NE	E	Е	E	E	N	
Kincardine, ,,	SE	sw	sw	W	NW	C	N	NE	С	NE	N	Е	SE	N	C	
Saugeen, "	sw	sw	sw	w	С	C	N	E	C	E	N	σ	C	N	C	
Little Current,,	₿₩	-		w			C			E			E			
Fort Garry, Man.	C	NW	c	C	C	c	w	NE	c	C	E	E	C	sw	C	
Stations.	24th August. 25th August.					ust.	26t	h Aug	ust.	27t	h Aug	nst.	28t	h Aug	ust.	
Sydney, N.S.	sw	C	С	N	NE	C	E	E	E	NE	NE	C	NW	E	E	
Halifax, "	N	N	NE	N	sw	C	N	Е	SE	N	Е	NE	N	S	SE	
Charl'town, PEI.	C	N	С	NW	N	C	C	NE	NW	NW	C	C	s	S	C	
Chatham, N.B.	C	NW	N	C	C	C	C	E	C	sw	И	C	C	C	C	
Father Point, Q.	w	w	s	sw	C	C	C	E	U	C	C	\mathbf{c}	s	sw	sw	
Montreal, "	N	s	sw	И	C	SE	SE	8	C	SW	c	sw	w	S	s	
Ottawa, Ont.	N	N	NW	N	s	И	И	8	N	N	W	SE	C	C	N	
Kingston, "	NE	E	C	sw	W	C	S	E	e e	C	W	C	C	sw	C	
Toronto, ,,	N	s	C	C	SE	NE	NE	SE	NE	C	SE	NE	И	NE	NE	
Port Dover, ,,	NE	s	NW	NE	C	N	N	C	N	N	E	N	N	C	E	
Port Stanley, ,,	NE	SE	N	N	SE	N	NE	E	NE	E	E	E	SE	SE	E	
Kincardine, "	N	N	С	s	N	S	C	C	s	W	N	SE	SE	N	E	
Saugeen, ,,	C	NW	i c	C	N	C	NE	NW	NW	NE	N	NE	E	N	N	
Little Current,,	N			E						C			C			
Fort Garry, Man	. C	w	w	NW	\downarrow c	S	S	SW	SE	SE	S	SE	SE	SE	S	

TABLE B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time

7 25 a.m. 0 43 p.m.

4 25 p.m.

Greenwich "		0 43 p.m. 9 43 p.m.							#1 - 1900 To 1 - 1	4 08 a.m. (of next day.)					
Stations.	19	th Au	gust.	20	th Au	gπat.	21	st Au	gust.	22	nd A	gast.	23	rđ Au	gust.
Sydney, N.S.	6	7	1	4	5	5	2	7	0	4	5	1	11	9	1
Halifax, ,,	8	3	1	1	6	2	4	2	3	1	4	3	3	9	2
Charl'town, PEI.	15	4	0	7	10	0	9	0	0	8	11	10	13	7	0
Chatham, N.B.	7	0	1	3	3	0	6	9	4	5	8	3	14	0	0
Father Point, Q.	6	5	5	1	1	9	9	11	5	2	3	4	7	5	3
Montreal, ,,	7	9	11	19	10	11	6	12	2	9	4	8	2	6	9
Ottawa, Ont.	1	4	В	4	14	6	2	3	5	4	8	6	5	4	6
Kingston, ,,	0	1	19	4	6	3	0	2	2	9	8	0	4	0	0
Toronto, ,,	1	9	2	7	9	0	4	11	3	9	8	3	3	9	4
Port Dover, ,,	4	4	11	11	5	3	4	4	7	8	7	5	5	12	4
Port Stanley, ,,	2	12	15	4	3	2	11	4	5	9	12	3	8	6	5
Kineardine, ,,	4	25	18	10	10	0	4	10	0	6	10	5	3	10	0
Saugeen, ,,	3	9	13	1	0	0	3	1	. 0	2	9	0	0	2	0
Little Current ,,	2			12			0			15			4		
Fort Garry, Man.	0	5	0	0	0	0	1	8	0	0	1	5	0	2	0
Stations.	24t]	h A ug	ust.	25th	Augu	ıs t.	26t	26th August.		271	27th August.			h Aug	nst.
Sydney, N.S.	7	0	0	7	3	0	2	2	1.	9	1.	0	2	3	2
Halifax, "	1	5	3	3	4	0	3	5	3	6	3	3	4	4	ti
Charl'town, PEI.	0	7	0	6	4	0	0	9	4	10	0	8	5	Ą	0
Chatham, N.B.	0	5	4	0	0	0	0	5	0	2	3	0	0	0	0
Father Point, Q.	1	1	1	1	0	0	0	1	0	0	0	0	1	4	i
Montreal, ,,	3	2	6	6	- 0	8	5	5	0	7	0	10	5	3	1
Ottawa, Ont.	4	7	4	5	4	1	2	9	2	2	3	3	0	0	5
Kingston, ,	2	3	0	4	2	0	4	1	o	0	1	0	0	1	0
Coronto, ,,	3	5	0	0	11	4	6	9	6	0	6	5	2	5	4
Port Dover, "	6	3 1	5	4	0	5	5	0	3	4	` 5	2	4	0	4
Port Stanley, ,,	8	8	5	5	6	5	2	2	5	2	15	18	26	12	4
Kincardine, "	2	5	0	2	3	4	0	0	3	3	10	3	4	8	3
laugeen, ,,	0	3	0	0 1	4	0	3	5	3	4	2	1	6	5	2
ittle Current,,	6		.	4	.	.	.	-	. [0	.	.	0		
Fort Garry, Man.	0	10	1	2	0	5	8	10	5	4	6	6	8	14	2

1874.

TABLE A .- A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Groomwich ,,		40 b	. 111.			40 F	ъ.ш.			4 00	8-111-	(01 1	IOX C	my.)	
Stations.	29th	Augu	st.	30tl	Augu	ıst.	31s	t Aug	ust.	1st S	eptem	ber.	2nd S	eptem	ber.
Sydney, N.S.	E	N	SE	E	SE	ន	sw	sw	SE	w	w	E	E	NE	N
Halifax, "	E	E :	NE	8	s	c	sw	sw	sw	NW	NW	NW	NW	N	N
Charl'town, PEI.	E	E	SE	SE	8	sw	sw	sw	sw	c	N	c	NW	NW	NW
Chatham, N.B.	NW	N	c	o	o	sw	8W	sw	c	w	NW	N	N	N	O
Father Point, Q.	sw	E	NE	NE	NE	sw	w	NE	w	w	sw	sw	w	w	C
Montreal, "	sw	c	w	sw	c	c	sw	NW	NW	NW	NW	NW	c	sw	8W
Ottawa, Ont.	N	8	N	N	sw	SE	w	w	O	sw	W	NW	w	sw	ន
Kingston, "	С	sw	0	С	\mathbf{w}	Ö	c	C	C	NW	NW	C	c	w	sw
Toronto, "	NE	SE	N	N	ន	NW	N	N	N	N	sw	w	w	s	sw
Port Dover, "	N	E	O	N	ន	sw	N	ន	NE	NE	SE	NW	NW	8	sw
Port Stanley, ,,	E	E	E	NE	SE	NW	N	w	NW	E	E	ន	N	E	w
Kincardine, "	E	s	E	E	N	N	NE	N	E	E	N	E	ន	8	ន
Saugeen, ,,	E	NW	c	N	C	С	N	NW	C	N	NW	c	C	sw	sw
Little Current,,,	SE	.	.	C			N	Į .		w			C		•
Fort Garry, Man	. NW	NW	NW	C	SE	8	SE	s	S	NW	NW	NW	NW	NW	NW
Stations.	3rd	Septen	ber.	4th	Septer	nber.	5th	Septe	mber.	6th	Septer	mber.	7th	Septer	aber.
Sydne y, N.S	NE	0	s	N	w	SE	sw	sw	s	sw	sw	8	E	E	w
Haiifax, ,,	NW	sw	sw	N	N	N	w	sw	8	sw	S	B	NE	NW	NW
Charl'town, PEl	. w	B	sw	NW	sw	sw	sw	sw	sw	sw	sw	sw	E	NE	N·
Chatham, N.E	s. sw	ន	NW	NW	S	sw	sw	s	sw	s	8	C	C	NW	NW
Father Point, Q	a. s	sw	w	s	B	w	sw	sw	sw	s	s	s	s	s	s
Montreal, ,	\mathbf{w}	N	NW	w	w	sw	S	s	s	sw	w	w	NW	NW	NE
Ottawa, On	t. sw	NW	w	s	s	c	E	E	s	B	s	sw	w	w	c
Kingston, ,	, sw	NE	C	NE	w	C	s	s	sw	w	sw	C	NE	sw	C
Toronto, ,	, sw	N	N	NE	EE	N	E	E	w	sw	w	w	NE	SE	N
Port Dover, ,	, sw	N	N	NE	SE	SE	s	S	w	w	sw	C	NE	s	B
Port Stanley, ,	, w	NW	N	NI	EE	E	E	sw	7 \ W	NW	sw	NM	E	E	E
Kincardine,	, N	N	E	E	N	SE	SISI	ន ន	N	v sw	w	w	E	w	w
Saugeen,	., и	C	G	N	e Nv	V N	e si	sva	7 sv	7 W	sw	r c	SE	sw	C
LittleCurrent,	., N			W	· .	·	SI	E .	•	w		.	SE	} .	1
Fort Garry, Ma	m. S	w	sw	' s	sw	r s	SE	sv	v S	s	SE	SE	SE	s	SE
Better . etterholisten in the same		~					234								

TABLE B.—A Supplement to Tables I and II, shewing the Direction of the Wind in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time Greenwich " 7 25 a.m. 0 43 p.m. 4 25 p.m. 9 43 p.m. 10 50 p.m.

4 08 a.m. (of next day.)

Stations.	29t	h A ug	gust.	30t	h Aug	rust.	31s	t Aug	ust.	1st	Septer	nber.	2nd	Septer	nber.
Sydney, N.S.	6	2	1	8	8	4	5	9	3	4	3	1	2	2	2
Halifax, ,,	6	2	5	4	6	0	3	5	5	3	2	1 8	8	8	4
Charl'town, PEI.	8	11	6	10	13	10	6	8	8	0	9	0	10	10	9
Chatham, N.B.	1	4	0	0	0	4	8	5	0	3	5	9	13	1	0
Father Point, Q.	1	3	2	3	1	1	3	10	8	4	4	2	1	2	0
Montreal, ,,	5	0	2	6	0	0	14	12	10	10	18	15	0	11	15
Ottawa, Ont.	2	4	5	2	2	3	4	10	0	2	10	4	3	1	2
Kingston, ,,	0	1	0	0	3	0	0	0	0	5	6	0	0	9	1
Toronto, ,,	3	9	5	5	4	2	11	11	11	2	7	3	6	11	1.
Port Dover, "	3	4	0	4	4	5	5	10	8	7	4	4	4	12	4
Port Stanley, ,,	8	8	2	2	3	3	6	12	8	5	8	1	2	2	5
Kincardine, "	5	2	3	1	3	3	5	8	2	3	5	4	5	12	18
Saugeen, "	5	2	0	2	0	0	1	4	0	3	1	0	0	8:	7 '
LittleCurrent, "	6			0			7			10			0		
Fort Garry, Man.	17	16	1	0	9	14	20	18	8	10	12	7	4	6	2
Stations.	3rd S	epten	ber.	4th S	epten	iber.	5th S	epten	ber.	6th S	Septen	ber.	7th S	Septen	ber.
Sydney, N.S.	4	0	7	9	4	1	9	9	3	8	10	2	5	15	22
Halifax, ,,	2	10	7	10	2	1	1	6	6	4	4	2	10	9	7
Charl'town, PEI.	3	6	12	14	5	8	11	6	3	6	9	14	3	23	21
Chatham, N.B.	5	11	13	8	7	1	8	4	4	9	7	0	0	10	8
Father Point, Q.	3	2	7	7	4	9	10	6	14	11	5	3	3	1	1
Montreal, ,	15	8	12	6	6	8	10	13	15	21	9	12	10	19	4
Ottawa, Ont.	5	10	3	1	5	0	2	6	14	15	9	3	4	15	0
Kingston, ,,	3	7	0	1	2	0	8	5	3	6	6	0	8	14	0
Toronto, ,,	4	11	6	6	8	6	6	4	8	13	14	3	4	6	6
Port Dover, ,,	8	4	5	6	4			12	13	5	10	0	3	4	3
Port Stanley ,,	14	4	5	8	17	4	- 6	9	15	2	13	1	12	3	9
Kincardine, ,,	9	9	3	2	3	3	18	15	10	10	2	2	5	3	2
Saugeen, ,,	3	9	0	3	. 3	- 1	16	14	4	3	3	0	4	5	0
LittleCurrent,,,	19	.		10			9	. [.	18	.	٠ إ	3		
Fort Garry, Man.	12	20	12	. 12	14	17	. 9	9	4	5	10	9	8	13	7

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Table A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:
Toronto civil time 7 25 a. m.
4 25 p. m.
10 50 p. m.

Greenwich "		0 4	3 p. 1			9 4	3 p.	m.		4	08	a. m.	(o f :	next	day.)
Stations.	8th	Septer	aber.	9th	Septen	nber.	10th	Septe	mber.	11th	Septe	mber.	12th	Septe	mber.
Sydney, N.S.	w	N	w	w	Е	s	s	w	w	NW	N	w	N	NE	NW
Halifax, "	c	N	NE	N	w	w	w	nw	NW	NW	N	N	N	N	N
Charl'town, PEI.	NW	N	С	NW	C	sw	w	w	C	w	NW	N	N	N	w
Chatham, N.B.	NW	N	C	C	s	sw	sw	NW	NW	NW	w	NW	N	E	σ
Father Point, Q.	s	s	s	w	sw	sw	w	sw	NW	NW	w	w	NW	w	NW
Montreal, ,,	N	С	NE	E	w	sw	w	NE	NE	SE	s	E	E	NE	NE
Ottawa, Ont.	w	N	C	NE	s	s	w	N	w	NE	E	c	NE	E	E
Kingston, "	NE	w	N	C	sw	sw	sw	c	С	O	SE	NE	NE	E	NE
Toronto, ,,	N	s	C	NW	s	w	w	s₩	C	C	s	w	NE	E	E
Port Dover, ,,	NW	s	NW	NW	s	NW	C	s	s	w	s	C	C	s	N
Port Stanley, ,,	w	NW	N	Е	E	E	NW	sw	w	N	sw	w	И	sw	E
Kineardine, "	w	NW	Е	SE	w	C	E	w	Е	SE	sw	E	SE	w	Έ
Saugeen, ,,	С	C	C	C	w	C	C	w	С	\mathbf{c}	w	С	C	C	sw
LittleCurrent, ,,	C			c			w			w			SE		
Fort Garry, Man.	C	SE	SE	SE	SE	SE	w	sw	sw	SE	NW	NW	w	sw	sw
Stations.	13th	Septer	nber.	14th	Sep te r	mber.	15th	Septer	nber.	16 th	Septe	mber.	17th	Septer	nber.
Sydney, N.S.	NE	N	C	w	sw	s	sw	s	s	s	SE	C	NE	NE	E
Halifax, ,,	NW	NW	NW	NW	sw	sw	w	sw	sw	sw	SE	C	NE	NE	NE
Charl'town, PEI.	w	С	C	sw	sw	sw	sw	sw	sw	s	C	N	NE	NE	N
Chatham, N.B.	C	C	C	sw	NE	C	s	sw	s	sw	sw	C	NW	NE	N
Father Point, Q.	w	s	w	C	C	C	\mathbf{c}	NE	\mathbf{s}	w	C	w	NE	NE	NW
Montreal, ,,	Е	s	sw	s	s	s	s	s	w	NE	NE	NE	Е	NE	E
Ottawa, Ont.	C	SE	N	C	s	SE	S	sw	ΝW	N	N	N	NE	NE	36
Kingston, ,,	\mathbf{c}	s	SE	sw	s	SE	S	sw	NE	NE	NE	NE	NE	NE	C
Toronto, ,,	N	Е	NW	NW	s	s	sw	NW	NW	N	\mathbf{E}	NE	E	Е	E
Port Dover, ,,	N	C	C	s	С	s	S	NW	sw	N	NE	NE	NE	E	SE
Port Stanley, ,,	NE	Е	N	s	SE	SE	sw	w	w	NE	N	NE	NE	Е	SE
Kincardine, ,,	s	NW	N	Е	s	s	NW	NW	N	NE	NE	E	SE	SE	s
Saugeen, ,,	SE	N	С	N	sw	s	NW	N	c	\mathbf{c}	NE	С	Е	Е	E
LittleCurrent,,,	C			E			w			N	.		E		
Fort Garry, Man.	s	s	w	w	NW	\mathbf{c}	sw	s	sŧ	s	SE	E	E	E	NW

TABLE B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time

25 a.m. Greenwich 0 43 p.m. 4 25 p.m. 9 43 p.m. 10 50 p.m. 4 08 a.m. (of next day.)

12th September. Stations. 8th September. 9th September. 10th September. 11th September. Sydney, N.S. Halifax. Charl'town, PEI. O Chatham, N.B. Father Point Q. Montreal, Ottawa, Ont. Kingston, Toronto. Port Dover, ., Port Stanley, " Kincardine. Saugeen. Little Current ,, Fort Garry, Man.

Stations.	13th	Septen	aber.	14th 8	Septen	nber.	15th	Septer	nber.	16th	Septer	nber.	17th	Septe	mber.
Sydney, N.S.	6	5	0	4	5	1	6	8	4	7	8	0	6	8	7
Halifax, "	5	2	1	2	7	6	2	5	5	4	3	0	4	10	7
Charl town, PEI.	6	0	0	5	5	4	8	8	4	10	0	8	1 6	13	15
Chatham, N.B.	0	0	0	3	2	0	4	9	13	6	4	0	10	5	6
Father Point, Q	2	1	1	0	0	0	0	4	9	4	0	5	11	5	2
Montreal, ,,	5	9	16	, 8	8	16	11	15	3	11	10	10	14	10	5
Ottawa, Ont.	0	5	4	0	8	8	9	31	10	12	7	6	6	14	4
Kingston, "	0	1	14	1.5	6	18	20	9	6	10	9	8	4	6	0
Toronto, ,,	7	10	7	2	9	5	8	12	6	10	7	8	7	11	12
Port Dover, ,,	7	0	0	10	0	15	12	16	13	10	13	6	6	3	7
Port Stanley, "	3		3			11	1.			. :					
Kineardine, "	10	10	1	4	15	20	15	15	4	4	10	3	12	13	4
Saugeen, ,,	5	5	0	4	9	1	8	8	0	0	7	0	4	4	2
Little Current ,,	0	,		3			8			10			9		
Fort Garry, Man.	12	16	19	20	20	0	3	15	8	5	7	12	20	8	6

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Table A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time	7 25 a. m.	4 25 p. m.	10 50 p. m.
Greenwich "	0 43 p. m.	9 43 p. m.	4 08 a. m. (of next day.)

Stations.	18th 8	Septem	ber.	19th 5	Septen	nber.	20th 5	Septen	ber.	21st	Septer	nber.	22nd S	epten	ber.
Sydney, N.S.	E	E	E	E	E	E	E	E	SE	s	s	sw	N	N	SE
Halifax, "	Е	E	E	SE	E	Е	SE	SE	SE	SE	sw	w	N	N	NW
Charl'town, PEI.	NB	o l	SE	SE	E	C	SE	SE	SE	SE	NW	NW	\mathbf{c}	c	C
Chatham, N.B.	N	NE	\mathbf{c}	C	E	E	С	c	SE	sw	C	NW	NW	8	o
Father Point, Q.	ន	s	s	NW	NE	NE	c	s	s	w	w	w	sw	\mathbf{w}	\mathbf{c}
Montresl, ,,	c	SE	SE	ន	SE	SE	ន	w	W	w	w	NW	sw	8	sw
Ottawa, Ont.	NE	NE	NE	Е	SE	SE	s	sw	w	NW	w	c .	C	s	8
Kingston, "	SE	8	SE	SE	ន	B	w	w	w	NW	w	C	SE	sw	sw
Toronto, ,,	s	SE	E	Е	s	s	w	w	w	w	sw	N	NW	sw	w
Port Dover, ,,	C	SE	E	S	SE	W	w	w	NW	C	w	NW	s	w	NW
Port Stanley, "	SE	E	E	E	SE	sw	w	w	W	w	w	NW	w	w	NW
Kincardine, ,,	s	w	SE	S	8	sw	w	w	N	E	SE	SE	ន	w	s
Saugeen, "	E	C	SE	SE	sw	sw	NW	w	NW	C	sw	S	sw	sw	C
Little Current ,,	C	.		sw			W	•		NW			sw		٠
Fort Garry, Man.	NW	N	NW	N	N	N	C	W	w	sw	W	NW	C	sw	S
Stations.	23rd	Septen	nber.	24th	Septe	mber.	25th	Septe	nber.	26th	Septe	mber.	27th	Septer	mber.
Sydney, N.S.	E	С	SE	NE	NE	SE	w	E	s	C	E	s	C	E	SE
Halifax, "	NW	SE	c	N	sw	NW	NW	sw	C	NW	SE	N	NE	E	E
Charl'town, PEI	.] C	0	C	c	С	C	C	C	С	C	C	C	C	C	C
Chatham, N.B	. sw	s	C	C	N	C	sw	s	sw	C	s	s	s	C	C
Father Point, Q	. s	s	C	w	NE	sw	C	NE	NE	w	E	NE	w	NE	NE
Montreal, ",	w	w	sw	s	s	sw	W	w.	sw	W	s	s	s	s	s
Ottawa, Ont	NW	s	N	E	SE	C	s	s	G	N	s	N	C	SE	s
Kingston, ,,	w	sw	C	s	sw	C	C	SW	C	sw	s	sw	s	s	C
Toronto, ,,	C	E	C	C	s	8	W	s	W	C	E	S	S	w	w
Port Dover, ,,	NW	s	C	N	SE	C	N	C	NW	$r \mid s$	C	s	ន	w	NW
Port Stanley, ,,	w	sw	11	E	W	W	N	E	E	SE	SE	SE	·W	N	N
Kincardine, ,,	8	s	SE	SE	s	SE	SE	8	SE	SE	SE	S	sw	sw	SE
Sangren, ,,	$\mid s \mid$	sw	N	NE	sw	C	U	C	N	NE	s	C	C	C	SW
Little Current, ,,	; C		! .	C		1.	W	1.		SE	1 .	1	M_{\star}	1 .	1
	à	1	1	ì	1	i	}	,	1	į)	1	i	ì	NW

1874.

Table B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto	civil	time
Granni		

7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich "	ше		3 p.m			9 43	3 p.m.	•			3 a.m		the n	ext d	ay).
Stations.	18th S	Septem	ber.	19th S	epten	ber.	20th S	Septen	iber.	21st S	eptem	ber.	22 nd 5	Septem	ber.
Sydney, N.S.	10	7	3	4	3	1	6	4	5	3	3	7	5	6	1
Halifax, "	8	11	8	7 }	7	5	1	6	3	4	3	5	5	1	2
Charl'town PEI.	8	0	11	7	8	0	8	15	8	3	15	3	0	0	0
Chatham, N.B.	5	3	0	0	2	1	0	0	3	2	0	1	6	1	0
Father Point, Q.	6	4	1	2	3	3	0	8	11	5	9	5	4	5	0
Montreal, ,,	0	10	12	4	14	15	12	13	10	10	11	6	9	10	11
Ottawa, Ont.	10	3	6	4	5	5	13	8	4	12	4	0	0	11	4
Kingston, ,,	6	7	2	8	15	17	9	13	1	4	3	0	4	11	10
Toronto, ,,	4	6	7	10	10	15	12	14	4	4	2	2	3	5	5
Port Dover, "	0	4	4	11	6	16	7	10	4	0	10	2	15	7	3
Port Stanley, "	•	.	6	. [45	18	.	.							
Kincardine, ,,	3	3	10	15	35	21	30	20	18	4	3	3	3	12	6
Saugeen, ,,	2	0	3	13	15	14	4	3	5	0 [4	6	1	10	O [*]
Little Current, ,,	0			10	.		20	.		6			8		
Fort Garry, Man.	16	12	8	8	8	3	0	7	• 4	10	n	3	0	12	21
Stations.	23rd	Septer	nber.	24th	Septer	nber.	25th	Septer	nber.	26th	Septer	nber.	27th	Septer	nber.
Sydney, N.S.	1	0	2	5	1	1	1	1	1	0	3	1	0	2	2
Halifax, ,.	1	5	0	3	3	1	1	3	0	3	5	4	4	5	7
Charl'town, PEI.	0	0	0	0	0	0	o	0	0	0	0	0	0	0	0
Chatham, N.B.	2	3	0	0	2	0	3	5	1	0	3	3	4	0	0
Father Point, Q.	2	1	0	5	7	2	0	5	1	1	5	4	2	5	2
Montreal, ,,	9	6	10	13	7	10	16	10	23	12	2	10	14	10	15
Ottawa, Ont.	6	4	4	4	3	0	3	3	0	3	6	6	0	8	10
Kingston, ,,	1	1	0	4	2	0	0	2	0	3	1	7	13	12	0
Toronto, ,,	0	8	0	0	2	2	4	8	4	0	7	10	10	2	2
Port Dover, ,,	3	4	0	4	4	0	3	0	3	5	0	7	10	5	5
Port Stanley, ,,		.		8		2		8	8	5	12	14	9	2	3
Kincardine, "] 3	8	4	4	8	5	4	3	5	8	6	14	8	5	4
Saugeen, ,,	1	1	2	1	7	0	0	0	5	7	1	0	0	0	2
Little Current ,,	0			0			5			5			14		.
Fort Garry, Man	. 4	4	0	7	10	5	9	20	0	4	23	10	3	15	1

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Table A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada. at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m. 10 50 p.m.

4 08 a.m. (of next day.)

C	0041	04	1	2011		,	40.1						1		==
Stations.	Zoth	Septen	nber.	Z9th	Septen	aber.	30th	Septe	mber.	18t	Octob	er.	2nd	Octol	er.
Sydney, N.S.	E	Е	Е	SE	sw	sw	s	s	sw	sw	s	sw	sw	s	ន
Halifax, .,	E	SE	s	s	sw	S	SE	sw	sw	sw	w	w	sw	s	s
Charl'town, PEI.	C	C	C	SE	sw	S	s	s	sw	s	$\mathbf{s}\mathbf{w}$	sw	sw	sw	sw
Chatham, N.B.	E	N	N	C	sw	SE	E	s	s	sw	sw	sw	C	s	s
Father Point, Q.	N	NE	NE	sw	W	sw	E	W	sw	w	w	sw	S	s	NE
Montreal, ,,	s	s	NW	NW	w	N	NW	NW	w	w	w	w	s	S	NW
Ottawa, Ont.	s	s	N	≱sw	С	N	NW	NW	NW	w	s	С	E	N	NW
Kingston, ,,	s	s	N	NW	C	N	NW	w	w	w	w	C	w	w	C
Toronto, ,,	w	C	NW	NW	w	w	NW	NW	w	w	sw	sw	w	w	NW
Port Dover, "	w	C	N	NW	w	NW	NW	NW	w	w	s	s	w	w	C
Port Stanley, "	N	NW	N	NW	sw	w	NW	NW	NW	NW	w	sw	w	NW	NW
Kincardine, "	Е	NW	NW	E	NW	NW	N	N	NW	w	8	w	NW	71 M	E
Saugeen, ,,	C	NW	NW	NW	NW	N	N	N	N	w	ន	sw	N	NW	C
Little Current,,	w			\mathbf{w}			NW			C			N	٠.	
Fort Garry, Man.	C	N	N	C	C	NE	ន	NW	NW	NW	NW	N	c	NE	N
Stations.	3rd	Octo	ber.	4tn	Octo	ber.	5th	Octo	ber.	6th	Octo	ber.	7th	Octo	ber.
Sydney, N.S.	sw	sw	sw	sw	w	SE	NW	c	E	NW	N	sw	w	w	w
Halifax, ,,	sw	sw	NW	NW	NW	NW	N	N	N	N	NW	C	N	sw	sw
Charl'town, PEI.	sw	sw	w	sw	sw	O	w	N	С	N	C	C	C	C	C
Chatham, N.B.	sw	sw	w	sw	w	NW	NW	C	C	NE	C	sw	C	С	sw
Father Point, Q.	sw	sw	sw												
Montreal, ,,	NW	w	w	w	w	NW	w	sw	s	s	s	SE	E	s	s
Ottawa, Ont.	sw	NW	W	NW	NW	N	C	N	N	NE	E	NE	NE	SE	E
Kingston, ',,	N	w	C	N	С	C	N	sw	SE	SE	SE	NE	NE	E	E
Toronto, ,,	N	NW	NW	NW	N	NW	NW	E	SE	SE	E	NE	NE	NE	N
Port Dover, "	NW	NW	N	N	NW	N	NW	s	s	ន	SE	8	NE	N	N
Port Stanley, "	N	NW	NW	N	NW	NE	NE	w	w	SE	w	N	NE	NE	NE
Kincardine, "	E	NW	NW	C	NW	E	SE	SE	SE	SE	NE	NE	NE	NE	NE
Saugeen, "	NE	NW	C	C	N	c	NE	NE	SE	SE	С	C	c	E	С
Little Current "	C	ļ.		N			C_{i}			SE			NE		
Fort Garry, Man.	E	SE	SE	SE	s	NW	NW	N	C	E	s	s	S	s	s

TABLE B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time Greenwich ...

7 25 a.m. 0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations. Sydney, N·S. Halifax, ,, Charl'town,PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont. Kingston, ,,	28th 3 7 0 1 2 15 6 12	Septer 3 11 0 3 6 8 3	1 7 0 1 5	29th 6 8 4 0 3	12 6 13 6	2 7 10	30th 16 12 18	Septer 12 12	10 10	9	Octob 5	14	11	Octol 5	er.
Halifax, ,, Charl'town,PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont.	7 0 1 2 15 6	11 0 3 6 8	7 0 1 5	8 4 0	6 13	7	12		1	1		:	- 1	5	7
Charl'town, PEI. Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont.	0 1 2 15 6	0 3 6 8	0 1 5	4 0	13		,	12	10	ا م	1		1	1	
Chatham, N.B. Father Point, Q. Montreal, ,, Ottawa, Ont.	1 2 15 6	3 6 8	1 5	0	(10	10		10	6	10	4 !	8	8	13
Father Point, Q. Montreal, ,, Ottawa, Ont.	2 15 6	6 8	5		6		10	17	18	11	6	13	4	18	13
Montreal, ,, Ottawa, Ont.	15 6	8		3		3	7	14	19	10	7	5	0	5	3
Ottawa, Ont.	6	1		,	δ	2	11	6	20	19	17	17	13	4	10
		ا و	5	4	8	4	19	20	15	19	17	11	10	11	15
Kingston, "	10	3	5	4	0	6	8	12	11	12	9	0	6	15	12
	14	4	5	1	0	4	8	4	`4	6	1	0	13	10	0
Toronto, ,,	3	0	12	9	2	6	1.7	20	3	7	8	15	16	12	3
Port Dover, ,,	5	0	11	5	5	10	15	15	7	7	20	24	13	17	0
Port Stanley, ,,			2	6	9	8	12	15	4	12	18	37	15	11	3
Kincardine, ,,	2	10	15	5	17	12	21	24	25	13	23	18	25	15	3
Saugeen, ,,	0	13	6	2	14	10	12	12	10	4	12	6	11	10	0
Little Current ,,	2			4			9			0		.	16		
Fort Garry, Man.	0	7	3	0	0	1	7	4	10	_ 1	24	12	0	8	2
Stations.	3rd	Octo	ber.	4th	Octo	ber.	5th	Octo	ber.	6th	Octol	ber.	7th	Octo	oer.
Sydney, N.S.	16	6	5	7	5	2	2	0	1	3	4	4	7	5	4
Halifax, ,,	7	5	5	2	3	1	4	2	3	6	1	0	1	8	1
Charl'town, PEI	13	3	3	6	4	0	1	5	0	5	0	0	0	0	0
Chatham, N.B.	8	5	8	6	6	6	7	0	0	1	0	2	0	0	2
Father Point, Q.	10	9	11												
Montreal, .,	13	14	6	13	7	8	5	5	4	11	7	4	7	8	11
Ottawa, Ont.	2	10	4	6	4	4	0	1	4	6	2	6	4	2	4
Kingston, ,.	2	5	0	3	0	0	2	1	4	3	4	3	3	4	1
Toronto, "	4	9	2	7	7	4	3	4	5	3	3	4	8	8	6
Port Dover, "	4	7	6	5	6	6	6	6	12	10	6	3	9	7	10
Port, Stanley, "	8	8	2	3	4	6	6	3	6	9	2	2	6	9	9
Kincardine, "	6	11	7	0	9	0	7	10	8	4	10	6	8	6	8
Saugeen, ,,	2	8	0	0	4	0	5	6	3	4	0	0	0	3	0
Little Current ,,	0			6			0	-		17			4		
Fort Garry, Man.	2	12	9	15	11	5	5	4	0	4	12	5	11	13	12

1874.

Table A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m. 4 08 a.m. (of next day.) 0 43 p.m. 9 43 p.m. Greenwich "

G1001111011 ,,			P				P					- (02		- 445	-,
Stations.	8th	Octol	er.	9th	Octol	oer.	10th	Octo	ber.	11th	Octo	ber.	12th	Octo	ber.
Sydney, N.S.	w	sw	se	NE	NE	sw	sw	8	ន	sw	sw	sw	sw	sw	sw
Halifax, ,,	w	s	SE	NE	sw	sw	w	8	SE	w	8W	sw	sw	sw	C
Charl'town, PEI.	C	С	c	c	c	sw	o l	С	s	sw	sw	w	sw	С	C
Chatham, N.B.	sw	8	s	C	С	sw	sw	s	ន	s	sw	sw	sw	w	C
Father Point, Q.								٠						.]	
Montreal, ,,	Е	8	SE	E	w	sw	s	8	5W	sw	sw	N	w	w	w
Ottawa, Ont.	NE	SE	E	E	sw	S	SE	E	8	8	sw	N	NW	sw	N
Kingston, "	С	E	C	С	sw	sw	8	sw	w	w	w	NW	NE	N	О
Toronto, .,	NW	С	nw	w	sw	w	sw	w	w	sw	w	w	NW	NW	NW
Port Dover, "	NE	С	NW	w	sw	ន	s	sw	w	w	w	w	NW	NW	NW
Port Stanley, "	NE	NE	NW	NW	sw	sw	sw	sw	NW	NW	NW	NW	NW	NW	N
Kincardine, "	NE	NW	C	sw	sw	B	sw	w	W	w	NW	N	NE	NW	NW
Saugeen, "	C	w	C	C	sw	8	sw	NW	w	NW	NW	N	N	N	N
Little Current "	C	.		sw			C			NW			NW		
Fort Garry, Man.	N	NW	C	w	NW	NW	NW	N	N	NW	NE	O	C	s	5
Stations.	13tl	Octo	ber.	14tl	Octo	ber.	15th	Octo	ber.	16tl	Octo	ber.	17tl	Octo	ber.
Sydney, N.S.	w	E	NE	NE	N	N	w	w	w	w	w	sw	w	s	sw
Halifax, "	NE	N	N	N	N	N	NW	w	w	NW	w	sw	sw	sw	sw
Charl'town, PEI	C	NE	c	N	NW	NW	w	w	w	w	w	С	sw	s	sw
Chatham, N.B.	N	N	N	NW	w	c	sw	sw	sw	sw	sw	C	sw	s	S
Father Point, Q.	١.														
Montreal, ,,	NW	NW	w	w	w	w	w	w	W	w	w	w	w	w	w
Ottawa, Ont.	NW	NW	NW	NW	sw	B	ន	E	sw	s	s	ន	8	sw	w
Kingston, "	N	N	C	N	C	С	w	sw	С	0	sw	C	sw	sw	w
Toronto, ,,	w	w.	w	w	8	w	c	s	w	w	ន	w	sw	w	w
Port Dover, "	NW	N	O	NW	s	NW	NW	s	NW	C	s	C	w	sw	NW
Port Stanley, ,,	NW	NW	N	N	sw	E	N	sw	E	C	sw	E	w	sw	NW
Kincardine, ,,	N	w	E	SE	w	SE	SE	SE	SE	SE	SE	s	sw	NW	NW
a	N	NW	10	SE	w	SE	SE	sw	\mathbf{s}	C	sw	sw	sw	NW	NW
Saugeen, ,,	1	174.44	"		1	ş	1		į.	1	1		1	(, ,	1
Saugeen, ,, Little Current ,,	N			ន			sw			sw			w		

Table B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich .. 0 43 p.m.

4 25 p.m 9 43 pm.

Greenwich "		0 43	3 p.m	•		9 43	pm.			4 08	3 a.m	. (ef	next	day.)	
Stations.	8th	Octob	er.	9th	Octol	er.	10th	Octol	ber.	11th	Octo	ber.	12th	Octo!	ber.
Sydney, N.S.	8	5	1	2	2	11	13	7	5	10	14	7	9	ę	5
Halifax, "	1	1	2	1	1	7	6	в	9	7	10	7	7	6	0
Charl'town, PEI.	0	0	0	0	0	3	0	0	6	11	19	4	5	0	0
Chatham, N.B.	2	4	1	0	0	7	4	5	3	1 1	5	4	6	9	0
Father Point, Q.													.)		•
Montreal, ,,	3	2	6	8	3	12	9	14	20	20	20	1 5	7	6	12
Ottawa, Ont.	4	3	3	1	4	5	6	11	8	10	5	9	10	10	8
Kingston, "	0	3	0	0	4	3	15	1.9	12	14	10	6	4	3	0
Toronto, "	2	0	5	6	2	4	8	10	15	6	16	5	6	12	9
Port Dover, "	7	0	4	4	11	13	30	14	13	11	14	6	6	14	10
Port Stanley, ,,	9	3	8	7	17	22	38	21	17	15	11	11	9	10	8
Kincardine, ,,	3		0	12	11	12	15	26	22	18	22	14	7	16	12
Saugeen,	0	1	0	0	10	1	2	8	10	16	18	8	7	6	7
LittleCurrent ,,	0			5			0			15			22		•
Fort Garry, Man.	15	7	0	4	20	12	9	13	2 0	12	7	0	0	14	13
Stations.	13th	Octo	ber.	14tł	Octo	ber.	15tł	Octo	ber.	16tl	Octo	ber.	17th	Octo	ber.
Sydney, N.S.	1	3	4	5	9	10	15	15	13	19	7	4	4	6	12
Halifax, "	2	6	5	10	4	2	7	7	9	6	2	6	2	7	5
Charl'town, PEI.	0	5	0	11	11	5	16	16	12	8	7	0	5	15	24
Chatham, N.B.	5	7	8	8	2	0	6	6	7	6	5	0	1	8	9
Father Point, Q.															
Montreal, "	2	8	8	10	8	11	17	22	26	14	12	15	13	2 0	12
Ottawa, Ont.	7	9	7	8	6	3	5	6	6	4	6	5	12	2	9
Kingston, "	2	2	0	4	0	0	2	10	0	0	6	0	8	9	2
Town	_	١ ۾		5	5	3	0	4	3	3	2	4	5	16	11
Toronto, ,,	6	8	6	, ,		1	1								
Port Dover, ,,	6	5	0	1	9	4	3	5	3	0	6	0	7	10	3
Port Dover, ,, Port Stanley, ,,		l	Į.	ł	l	4 3	3 9	5 5	3	0	6	6	7 11	10 8	3 2
Port Dover, ,, Port Stanley, ,, Kincardine, ,,	6	5	0	1	9	1		•	·		- 1	_			-
Port Dover, ,, Port Stanley, ,, Kincardine, ,, Saugeen, ,,	6 6	5 9	0 2	1 3	9 2	3	9	5	3	0	8	6	11	8	2
Port Dover, ,, Port Stanley, ,, Kincardine, ,,	6 6 9	5 9 10	0 2 6	1 3 6	9 2 7	8	9 5	5 2	3 5	0	8 5	6 14	11 12	8 18	2 25

TABLE A .- A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m.

10 50 p.m.

Greenwich 0 43 p.m. 9 43 p.m.

4 08 a.m. (of next day.)

Stations.	186h	Octol	er.	19th	Octo	ber.	20th	Octo	ber.	21st	Octol	ber.	22n c	l Octo	ber.
Bydney, N.S.	s	SE	SE	sw	w	sw	sw	sw	w	w	w	sw	s	N	w
Halifaz, "	sw	N	N	NW	NW	w	w	NW	w	NW	w	w	w	w	NW
Charl'town, PEI.	s	s	s	sw	sw	sw	w	sw	sw	w	C	sw	sw	N	C
Chatham, N.B.	ន	$ \mathbf{c} $	N	w	w	sw	sw	w	w	sw	w	s	S	N	w
Father Point, Q.		.							F 33						
Montreal, ,,	w	NW	NW	w	w	w	w	w	w	N	w	w	w	w	N
Ottawa, Ont.	w	w	NW	w	\mathbf{w}	w	s	w	w	C	SE	С	sw	sw	\mathbf{c}
Kingston, ,,	NW	N	N	N	W	NW	sw	. w	NE	NE	sw	NW	C	sw	\mathbf{c}
Toronto, ,,	W	N	C	w	s	w	sw	sw	NW	NE	SE	N	C	С	NW
Port Dover, "	w	NW	NW	NW	w	G	sw	ន	C	N	C	N	N	C	N
Port Stanley, ,,	NW	NW	NW	NW	sw	NW	w	sw	w	NE	w	N	N	E	NE
Kincardine, ,,	NW	N	SE	SE	S	sw	s	N	NE	NE	NE	E	E	N	E
Saugeen, .,	NW	NW	NE	С	sw	sw	sw	NW	E	C	C	C	E	C	NE
LittleCurrent ,,	NW			C			sw			C			С		. •
Fort Garry, Man	SE	ន	ន	C	N	С	NW	C	С	C	sw	C	ន	sw	9
Stations.	23rc	Octo	ber.	24t)	1 Octo	ber.	25t	h Octo	ber.	26t]	o Octo	ber.	27t]	Octo	ber.
Sydney, N.S.	NW	NW	8W	sw	sw	sw	sw	s	SE	w	sw	sw	sw	s	8W
Halifar, "	N	NW	NW	NW	w	C	c	w	w	NW	sw	C	8	S	8
Charl'town, PEI.	sw	C	C	sw	C	sw	sw	C	O	C	sw	C	sw	sw	8
Chatham, N.B.	w	s	sw	sw	sw	sw	sw	O	sw	sw	8	B	8	s	8W
Father Point, Q.				١.		.						.			
Montreal, ,,	NE	E	E	s	ន	8	w	w	w	sw	w	w	w	w	W
Ottawa, Ont.	N	NE	NE	N	N	N	C	C	B	s	s	s	C	w	NW
Kingston, "	NE	NE	C	sw	C	C	sw	C	C	sw	sw	w	w	NW	C
Toronto, "	NE	SE	NE	NE	E	N	N	E	NE	C	sw	w	w	NW	W
Port Dover, "	N	N	N	C	C	N	C	S	C	s	s	s	w	w	O
Port Stanley, "	NE	E	E	E	SE	E	SE	SE	E	SE	w	w	w	NW	N
Kincardine, "	E	N	SE	SE	SE	SE	SE	s	SE	s	S	NW	NW	NW	NW
Saugeen, "	SE	C	SE	SE	C	S	SE	C	s	C	sw	NW	NW	NW	NW
Little Current ,,	C			C		.	C			S			NW		
Fort Garry, Man.	S	s	SE	SE	E	E	SE	W	NW	NW	NW	NW	C	w	C
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Table B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich " 0 43 p.m. 4 25 p.m. 9 43 p.m.

Stations.	18th	Octob	er.	19th	Octob	er.	20th	Octob	er.	21st	Octob	er.	22nd	Octol	er.
Sydney, N.S.	1	6	23	8	16	11	15	11	11	10	6	5	6	9	10
Halifax, ,,	5	4	7	5	6	10	12	1	5	3	1	5	7	1	4
Charl'town, PEI.	14	6	18	11	8	18	13	10	3	15	0	3	13	5	0
Chatham, N.B.	4	0	15	3	13	15	11	0	8	5	6	8	9	6	9
Father Point, Q.						.	.]						. }		
Montreal, ,,	11	13	10	19	18	20	15	17	10	6	15	25	21	15	ď.
Ottawa, Ont	. 8	10	12	9	10	5	4	4	5	0	4	0	6	3	0,
Kingston, ,,	3	4	10	4	3	5	8	9	12	2	2	1	0	2	0
Toronto, ,,	1	19	0	2	3	4	16	8	3	6	3	3	0	0	2
Port Dover, ,,	3	14	8	4	9	0	5	11	6	14	0	6	7	0	8
Port Stanley, "	9	19	2	5	11	6	5	18	4	4	9	7	6	5	8
Kincardine, "	25	15	3	5	4	13	9	9	10	1	1	5	4	- 5	4
Saugeen, ,	12	11	1	0	6	8	11	3	5	0	0	0	7	0	3.
Little Current ,,	15	.	•	0		.	6			0		•	0		•
Fort Garry, Man	. 10	16	9	0	17	0	1	0	0	0	12	0	9	12	14
Stations.	23r	l Octo	ber.	24t1	Octo	ber.	25tl	Octo	ber.	'26th	Octo	ber.	27tl	Octo	ber.
Sydney, N.S	. 10	7	2	7	5	6	4	2	1	5	6	4	7	5	7
Halifax, ,,	3	3	1	1	7	0	0	3	2	1	2	0	2	4	3
Charl'town, PE	3	0	0	4	0	5	4	•	0	0	2	0	8	4	4
Chatham, N.E	. 3	4	3	3	5	3	4	0	3	4	5	6	6	5	5
Father Point, Q	. .														
Montreal, ,,	. 7	4	6	4	5	3	10	6	10	10	11	16	14	1 7	15
Ottawa, On	E. 3	4	2	5	3	3	0	0	3	3	5	7	0	10	12
Kingston, ,,	4	1	0	8	0	0	4	0	0	5	2	3	3	8	0
Toronto, ,,	6	9	3	2	4	2	1	7	3	0	9	3	3	21	4
Port Dover, ,,	8	12	8	0	0	3	0	1	0	4	7	4	6	11	0
Port Stanley,	, 5	6	7	8	5	3	4	8	3	3	9	8.	8	6	3
Kincardine, ,	6	б	9	4	6	5	5	6	6	8	6	14	ıı	15	12
Sangeen, ,	,	1 0	4	3	0	2	4	0	3	0	4	7	9	8	6
Little Current,	, o			0			0			6			10		
Fort Garry, Ma	ու 12	14	5	5	10	12	10	13	13	9	8	1	0	2	i as

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TABLE A .-- A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m. 10 50 p.m.

Greenwich ,, 0 43 ρ.m.

4 08 a.m. (of next day.)

Stations.	2 8 t h	Octob	er.	2 9th	Octol	be r.	30th	Octo	ber.	31s1	t Octo	ber.	1st]	Noven	ber.
Sydney, N.S.	sw	E	sw	NE	N	sw	s	sw	sw	sw	B	sw	s	w	σ
Halifax,	SE	SE	SE	N	NE	SE	8	w	w	¢	8W	С	w	N	NW
Charl'town, PEI.	8	B	N	N	NE	8E	8	w	w	sw	NE	σ	c	w	σ
Chatham, N.B.	sw	С	c	N	E	8	C	O	8	sw	w	E	N	w	σ
Father Point, Q.				•				•							
Montreal, ,,	NW	w	w	E	w	w	w	w	w	w	w	w	w	w	W
Ottawa, Ont.	N	8	σ	E	NE	w	8	w	И	NW	w	N	8	8	B
Kingston, ,,	NE	E	E	SE	w	w	W	NΨ	w	NW	NE	w	NW	w	NW
Toronto, ,,	NW	E	SE	NE	w	w	w	w	w	W	NW	w	sw	w	W
Port Dover, ,,	NW	E	E	8	w	w	w	w	w	sw	w	w	w	w	W
Port Stanley, ,,	NE	SE	E	w	w	w	w	W	W	W	w	NW	sw	w	W
Kincardine, ,,	N	E	SE	SE	sw	sw	W	w	w	NE		W			W
Saugeen, ,,	C	E	SE	sw	sw	w	w	sw	C	NE	NW	C	sw	NW	NE
Little Current,,	E			SE	,		NE			NE	•		w		
Fort Garry, Man.	C	N	N	N	N	N	N	N	NW	sw	NW	NW	o	SE	SE
Stations.	2nd 1	Noven	ber.	3rd]	Noven	ber.	4th]	Vover	aber.	5th	Noven	ber.	6th	Novem	ber.
Bydney, N.S.	8	w	N	o	s	s	вw	sw	sw	sw	sw	sw	sw	SE	NE
Halifax, ,,	NW	NW	NE	C	8W	sw	w	sw	sw	W	sw	w	8W	sw	NW
Charl'town, PEI.	sw	sw	NW	W	8	sw	sw	sw	O	8W	8	sw	sw	σ	N
Chatham, N.B.	N	NW	C	8	sw	sw	S	С	sw	sw	s	sw	8	NE	NE
Father Point, Q.	! •									· •					
Montreal, ,,	W	w	w	S	sw	sw	s	8	ន	8	w	w	w	NW	NW
								1	~	~~~		S	w	w	W
Ottawa, Ont.	w	C	σ	C	E	S	SE	SE	S	SE	S	8	w	, w	1
Ottawa, Ont. Kingston, "	w Nw	c sw	o s	C 8	E SW	S	SE S	SE	ន	S.E	sw	sw	w	NW	C
***				{ -	}	•			1		1			1	1
Kingston, "	NW	sw	8	8	sw	S	s	s	s	8	sw	sw	w	NW	C
Kingston, ,,	NW C	sw se s	s c	8	sw sw	s sw	s c	s	s s	s sw	sw sw	sw sw	w w	NW W	C W
Kingston, ,, Toronto, ,, Port Dover, ,,	NW C	sw se s	8 C 8	s c s	sw sw	sw sw	S C S	8 8 8	s s	s sw s	sw sw	sw sw sw	w w sw	NW W	C W
Kingston, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,,	NW C C NW	sw se s	s c s sw	s c s sw	sw sw s	sw sw sw	s c s sw	s s s	S S SE	s sw s	sw sw s	sw sw sw	w w sw w	NW W W	C W C E
Kingston, ,, Toronto, ,, Port Dover, ,, Port Stanley, ,, Kincardine, ,,	NW C C NW S	SW SE SW SE	S S S S E	s s sw s	sw sw s sw sw	sw sw sw sw	s c s sw s	s s se s	S S S S S	s sw s sw s	sw sw s sw s	sw sw sw sw	w w sw w	NW W SW W	C W C E SE

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Table B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations.	28 t h	Octob	er.	29 t h	Octob	er.	30th	Octob	er.	31st	Octob	er,	1st N	lovem	ber.
Sydney, N.S.	4	4	3	9	5	1	7	6	6	7	5	1	6	9	0
Halifax,	3	5	1	6	1	8	8	8	2	0	5	0	9	1	1
Charl'town, PEI.	3	1	1	9	5	16	18	0	6	3	5	0,	0	8	0
Chatham, N.B.	5	0	0	7	в	5	0	0	5	2	3	2	2	4	0
Father Point, Q.						.	. [. \		•
Montreal, ,,	5	16	1	7	9	26	19	12	10	11	13	6	12	13	14
Ottawa, Ont.	7	3	0	8	2	8	8	4	5	4	12	8	6	4	6
Kingston, ,,	2	1	а	2	7	5	12	8	8	5	4	б	5	12	7
Toronto, "	5	4	12	3	22	15	9	9	8	1	15	4	11	15	3
Fort Dover, ,	3	6	4	18	25	15	14	14	12	8	10	9	13	12	7
Port Stanley, ,,,	2	23	14	11	32	24	23	24	25	23	18	14	35	18	15
Kincardine, "	4	12	18	13	. }	• ;	15	17	21	5		20	.		9
Saugeen, "	0	3	13	2	26	12	5	12	0	1	11	0	23	17	в
Little Current ,,	8			10	• ;	•	3			15			10	•	
Fort Garry, Man.	0	17	9	12	14	10	21	8	3	9	13	8	0	13	8
Stations.	2nd	Noven	ber.	3rd	Nover	ıber.	4th	Nover	ıber.	5th	Nover	aber,	6th	Νοτερ	aber.
Sydney, N.S.	1	9	7	0	2	4	12	5	4	7	14	10	5	2	5
Halifax, "	2	1	2	0	3	1	3	2	3	1	4	7	6	5	б
Charl'town, PEI.	9	в	6	8	10	12	10	8	0	10	13	16	3	0	12
Chatham, N.B.	5	3	0	4	2	10	6	0	4	11	12	9	3	4	14
Father Point, Q.															
Montreal, "	11	4	12	19	15	18	15	10	17	25	21	14	30	20	18
Ottawa, Ont.	9	0	0	0	7	5	2	4	3	2	12	5	14	17	8
Kingston, ,,	4	1	7	15	7	21	15	2	16	27	8	3	13	6	0
Toronto, "	0	7	0	0	10	2	0	6	3	6	3	4	7	11	4
Port Dover, "	0	12	13	16	13	8	3	5	5	12	14	15	4	. 9	9
Port Stanley ,,	15	12	17	18	11	15	8	23	8	33	23	23	9	14	3
Kincardine, ,,	10	7	9	12	18	11	7	18	23	20	19		21	4	7
Saugeen, ,,	3	2	4	5	7	7	1	7	9	8	13	13	19	2	1
Little Current "	0			15			11			18			15	.,	.,
Fort Garry, Man.	3	12	9	2	10	0	0	11	7	8	24	5	3	13	7

1874.

TABLE A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

4 25 p.m. 9 43 p.m.

Greenwich " 0 43 p.m.

Stations.	7th N	lovem	ber.	8th I	8th November.			loven	ber.	10 th I	Noven	iber.	11th	Novei	nber.
Sydney, N.S.	NE	NE	NE	NE	NE	NE	NE	NE	NE	w	w l	w	w	s	sw
Halifax, ,,	N	NE	NE	N	w	w	c	c	c	NW	w	w	sw	sw	w
Charl'town, PEL	N	N	NW	NW	8	8	\mathbf{c}	c	E	NW	NW	NW	w	sw	NW
Chatham, N.B.	NE	c	c	s	8	s	c	N	N	NW	w	w	S	NW	W
Father Point, Q.	.	.]	.				. \			.]			.]		
Montreal, ,,	N	w	8	8	8	S	w	W	w	w	w	E	w	w	N
Ottawa, Ont.	w	s	E	NE	ន	s	sw	o.	c	w	NE	NE	w	w	NW
Kingston, "	c	c	c	sw	sw	sw	\mathbf{w}	w	w	NE	NE	C	w	w	W
Toronto, ,,	N	E	c	E	sw	w	w	W	w	N	NE	W	w	NW	W
Port Dover, "	NW	E	С	s	S	w	NW	sw	C	ន	sw	w	w	NW	NW
Port Stanley, "	SE	SE	SE	sw	sw	w	ŊW	sw	w	SE	sw	NW	NW	NW	NW
Kincardine, ,,	SE	SE	SE	SE	sw	sw	S		E	SE	W	NW	w	NW	N
Saugeen, "	SE	SE	SE	s	sw	sw	sw	sw	N	SE	sw	NW	NW	NM	N
Little Current ,,	SE	. {		s			sw		. !	E			NW		
Fort Garry, Man.	NW	N	N	NW	C	N	E	SE	NE	NE	N	N	N	N	C
Stations.	12th	Noven	ber.	13th	Nove	nber.	14th	Nove	nber.	15th	Nover	nber.	16th	Nove	mber.
Sydney, N.S.	w	sw	w	sw	w	w	NW	N	w	NW	NW	w	w	w	N
Halifax, "	w	w	W	W	w	NW	NW	NW	NW	NW	NW	w	w	NW	ł .
Charl'town, PEI.	w	sw	w	w	NW	NW	NW	NW	w	NW	w	sw	w	w	NW
Chatham, N.B.	w	NM	sw	w	NW	NW	NW	NW	NW	NW	s	w	w	NW	NW
Father Point, Q.		-	٠.												
Montreal, "	w	NW	NW	w	Nii	N	N	NW	s	S	s	W	NW	N	E
Ottawa, Ont.	W	w	w	w	W	w	N	C	E	E	N	s	w	Q	E
Kingston, "	w	0	C	NW	NW	N	NE	NE	NE	s	w	w	O	C	E
Toronto, .,	w	NW	w	NW	NW	NW	N	SE	SE	w	w	w	w	NE	E
Port Dover, ,,	NW	NW	w	NE	NW	N	NE	E	s	B	w	N	NW	E	SE
Port Stanley, "	NW	NW	NW	NW	NW	NW	NE	SE	SE	sw	w	N	NE	E	SE
Kincardine, "	N	NW	N	E	N	E	E	SE	SE	NW	w	W	E	E	SE
Saugeen, ,,	N	NW	NE	NE	E	E	E	SE	SE	NW	sw	NW	C	SE	SE
Little Current ,,	NW			N			NE			w			C		
Fort Garry, Man.	c	w	sw	SE	SE	SE	w	NW	NW	w	w	C	NE	N	N

Stations.

1874,

Table B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

7th November. 8th' November. 9th November. 10th November. 11th November.

Sydney, N.S.	13	12	10	7	3	3	10	9	7	8	15	12	12	4	3
Halifax, ,,	10	10	7	4	2	1	0	0	0	4	7	5	3	8	10
Charl'town, PEI.	21	16	5	1	3	1	0	0	4	11	15	19	8	8	11.
Chatham, N.B.	5	0	0	2	4	2	0	2	2	10	14	4	5	3	7
Father Point, Q.	•			,.,						,		٠	•		•
Montreal, ,,	1	4	16	16	21	25	16	15	21	19	3	7	26	28	14
Ottawa, Ont.	3	4	7	3	7	14	2	0	. 0	4	4	в	8	23	7
Kingston, ,,	0	0	0	23	18	21	4	4	3	. 2	5	0	17	3	5
Toronto, ,,	3	8	0	3	11	3	3	12	6	4	7	6	21	20	5
Port Dover, ,,	4	7	0	13	12	7	4	6	0	4	14	16	13	16	8
Port Stanley, ,,	23	15	12	12	6	15	7	12	8	20	15	18	21	15	9
Kincardine, ,,	4	12	15	18	19	18	5		4	14	14	24	22	21	15
Saugeen, ,,	6	8	13	9	8	18	1	7	6	10	6	20	23	14	5
Little Current ,,	8			24		٠.	11			22			17		
Fort Garry, Man.	3	9	16	9	0	5	5	5	3	4	10	2	2	3	0
Stations.	12th	Neve	nber.	13th	Nover	nber.	14th	Nover	nber.	15th	Nover	aber.	16th	Nove	nber.
9.1													_		
Sydney, N.S.	15	11	14	14	9	3	5	16	6	7	8	8	7	6	9
Halifax, ,,	17	12	6	б	9	7	14	15	14	13	6	7	10	1	16
Charl'town, PEI.	13	9	13	7	3	6	8	14	9	9	7	3	8	6	14
Chatham, N.B.	12	9	7	6	5	3	7	8	10	7	3	8	5	10	8
Father Point, Q.	•		•					•				•	. !	•	,
Montreal, ,,	21	18	12	20	10	11	6	2	12	10	9	15	15	4	6
Ottawa, Ont.	12	13	14	11	9	10	4	0	5	4	4	3	4	0	6
Kingston, ,,	6	0	0	4	3	4	2	1	6	16	4	3	0	0	8
Toronto, "	4	12	6	9	7	3	4	6	12	9	9	4	2	7	13
Port Dover, ,,	6	10	5	7	7	3	9	6	19	15	6	3	7	5	4
Port Stanley, ,,	12	11	9	12		٠,		,			•	•	٠	•	**
Kincardine, "	15	20	15	9	10	8	8	10	19	18	15	11	5	8	15
Saugeen, ,,	7	14	9	4	2	2	6	12	14	12	18	5	0	4	16
Little Current,	18		,	10	•		12	,	,	15	٠	•	0		
Fort Garry, Man,	0	1	4	12	22	19	14	12	8	8	8	0	8	15	8

1874.

TABLE A .-- A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich 0 43 p.m. 4 25 p.m. 9 43 p.m.

10 50 p.m.

4 08 a.m. (of next day.) Stations 18th November. 17th November. 19th November. 20th November. 21st November. N.S. N O sw w Sydney. g NW w w w SE SE E 16 ĸ NW sw sw Halifax. S w NW w w 8W w N N SE \mathbf{E} К N NW Charl'town PET w w NW w w g Я NW NW S 77 NE NE sw 8W w NW sw Chatham, N.B. 8 8 w w sw 8 \mathbf{R} NE N NW Father Point, Q. E S W w N N Montreal. sww W 9 s S w w N Ottawa. Ont. ĸ a ø w sw NW NW w S ĸ NE sww N \mathbf{E} sw w w NW Kingston. 8 σ O w NW C \mathbf{C} O SE sw NW w Toronto. SE w w N w w w N NE W w W w w .. 8W Port Dover. 8 NW NW NW C W C NW NE w w w w W Port Stanley, .. 8 NW NW NW NW NW SE N N NW NW NW N w NW Kincardine. SW NW NW NW N w w swSE SE w w w NW \mathbf{E} swNW Saugeen. NW NW NW NW NW 8W SE SE NW W W C NE sw Little Current .. N NW ø NW w Ø w wsw swW N Fort Garry Man. swNW NW N N \mathbf{E} SE Stations. 22nd November. 23rd November. 24th November. 25th November. 26th November. w w NW Sydney. N.S. W æ SE SE swSWswwe Я sw w NW Halifax w NW N w SE sw sw w w sw w w w NW \mathbf{E} Charittown, PEL. NW w NW W T. \mathbf{E} S swSW swsw NW w w W sw swChatham, N.B. w NW W \mathbf{C} \mathbf{C} \mathbf{E} 8 8 W w \mathbf{c} w S Father Point, Q Montreal. N E E Ε E w w w W W W w w w S N Ottowa Ont. \mathbf{E} NE NE E NE sww sww W w \mathbf{c} w C NW NE sw w Kingsten. \mathbf{c} NE NE NE \mathbf{E} SW W NW NWC C Toronto, NE \mathbf{E} \mathbf{E} \mathbf{E} sww W W W NW W W W SE SE Port Dover. ME \mathbf{E} \mathbf{F} S sw sw w w w w W w w 8 S W w Port Stanley, ,, SE SE SE SE w W W w W w W SE SE Kincardine, W w w w w \mathbf{E} \mathbf{E} SE SE NW N w S SES w w S SE SE SE SE NW NW NW N \mathbf{E} SESaugeen, NW \mathbf{g} \mathbf{E} Little Current .. Ю N N E Fort Garry. Man. E \mathbf{K} W NW N N NW NW NW NW NW O NW O NE

TABLE B .- A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. 4 25 p.m.

10 50 p.m.

Greenwich ,,		0 43	p.m.							4 08	a.m.	(of 1	next o	lay.)	
Stations.	17th	Novem	ber.	18th	Noven	ıber.	19th 1	Novem	ber.	20th 1	Noven	ber.	21st !	Vovem	ber.
Sydney, N.S.	13	0	4	4	7	2	12	8	11	13	1	2	5	2	5
Halifax, ,,	10	1	3	10	9	11	17	15	10	1	10	14	15	2	19
Charl'town, PEI.	6	4	13	5	6	9	11	10	13	4	20	9	9	6	4
Chatham, N.B.	2	2	6	6	7	17	5	6	5	1	8	2	3	7	10
Father Point, Q.							.			.			.		
Montreal, ,,	11	16	13	15	25	18	10	15	8	11	16	1	10	16	12
Ottawa, Ont.	10	0	0	8	14	8	4	4	4	4	6	3	7	12	8
Kingston, ,,	30	в	0	4	6	0	0	3	0	8	4	6	5	0	10
Toronto, "	3	7	5	9	12	4	5	1	5	2	8	10	12	14	6
Port Dover, "	17	3	7	7	11	0	3	0	6	12	13	13	10	12	13
Port Stanley, "		.]			9	3	8	6	3	9	9	•		15	12
Kincardine, "	14	17	13	15	11	14	10	5	5	5	18	18	22	10	9
Saugeen, "	13	11	13	13	2	14	14	6	5	1	7	13	13	0	2
Little Current,,	13			10			8			0			7	.	
Fort Garry, Man	0	6	4	4	12	9	10	8	3	1	8	3	6	16	16
Stations.	2 2nd	Nove	mber.	23rd	Nove	mber.	24th	Nove	mber.	25th	Nove	aber.	26th	Nover	nber.
Sydney, N.S	8	16	18	8	2	8	19	13	12	13	4	1	1	9	7
Halifax, "	21	16	10	6	17	24	20	18	17	16	6	1	7	6	1
Charl'town, PEI.	20	13	14	3	5	30	13	14	11	8	12	1	3	5	6
Chatham, N.B.	12	11	5	0	0	15	19	18	15	8	9	3	0	5	3
Father Point, Q.										-					
Montreal, ,,	6	4	14	21	11	11	17	29	19	14	13	10	8	4	13
Ottawa, Ont.	4	6	14	22	14	4.	1,8	10	c	8	. 8	8	6	2	0
Kingston, "	2	12	16	4	19	18	31	12	9	4	0	0	o	0	18
Toropto, "	12	21	15	10	20	24	24	14	12	3	9	5	4	7	1.2
Port Dover, ,,	6	11	9	18	25	50	24	20	13	7	11	6	4	16	17
Port Stanley, "	27	30	30	18	57	34	30	30	15	15	12	8	12	27	12
Kinoardine, "	10	23	22	15	36	40	30	22	15	12	15	11	10	17	15
Saugeen, ,,	9	15	17	14	22	22	28	18	8	2	6	7	4	2	4
Little Current ,,	11		.	25			15			9			13		
Fort Garry, Man	9	4	14	20	12	6	5	4	2	0	2	0	8	16	12

1874.

TABLE A .- A Supplement to Tables I and II, showing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich " 0 43 p.m. 4 25 p.m. 9 43 p.m.

Stations.	27th	Novem	ber.	28th]	Noven	ıber,	29th	Noven	iber.	30th	Noven	ber,	1st l	Decem	ber-
Sydney, N.S.	NW	sw	sw	sw	sw	g	SE	s i	s	w	sw	w	w	sw	SE
Halifax, ,,	NW	8	sw	w	sw	E	SE	s	sw	w	w	w	w	E	NE
Charl'town, PEI.	w	s	sw	sw	sw	E	SE	s	N	w	w	w	w	sw	sw
Chatham, N.B.	8	s	s	sw	o	NE	s	s	w	s	w	sw	8	s	8
Father Point, Q.							.				. }			. }	
Montreal, ,,	s	8	w	w	M	N	NW	w	sw	sw	sw	w	sw	SE	8
Ottawa, Ont.	S	SE	w	N	NE	NW	w	sw	w	w	w	c	NE	NE	NE
Kingston, ,,	ន	sw	0	c	NE	N	С	w	C	C	C	NE	s	s	sw
Toronto, ,,	sw	w	W	NW	N	N	s	w	w	NW	w	w	s	w	W
Port Dover ,,	ន	sw	NW	N	N	N	sw	w	w	w	w	C	S	зw	sw
Port Stanly, ,,	sw	sw	NW	NW	NE	NE	w	NW	NW	NW	w	w	SE	sw	w
Kincardine, ,,	sw	w	w	N	NE	SE	w		w	E	sw	s	SE	sw	w
Saugeen, ,,	sw	w	sw	NW	C	E	w	NW	NW	Е	NW	s	SE	sw	w
Little Current ,,	w			w			NW			O			s		
Fort Garry, Man.	w	sw	w	w	w	w	NW	NW	NW	s	s	s	N	s	s
Stations.	2nd	Decen	ber.	3rd	Decen	aber.	4th	Decer	iber.	5th	Decer	aber.	6th	Decer	aber.
Sydney, N.S.	sw	SE	sw	s	sw	sw	sw	NE	NE	NE	NE	N	sw	w	s
Halifax, "	NW	s	w	s	s	sw	NW	NW	N	N	N	sw	w	c	SE
Charl'town, PEI.	sw	s	s	s	s	sw	N	N	N	N	E	sw	w	С	С
Chatham, N.B.	С	sw	sw	s	sw	N	N	NW	N	w	sw	s	sw	s	s
Father Point, Q.															
Mentreal, ,,	w	sw	S	sw	w	NW	NW	sw	sw	w	w	w	w	N	sw
Ottawa, Ont.	C	E	Е	s	w	w	w	SE	G	C	C	C	NE	NE	o
Kingston, ,,	C	s	s	w	N	NE	NE	C	С	E	C	C	s	C	O
Toronto, "	sw	SE	sw	w	NW	NW	N	E	SE	C	w	sw	sw	sw	sw
Port Dover, ,,	С	s	s	sw	NW	N	N	E	N	s	w	C	NW	sw	G
Port Stanley, "	NE	sw	sw	sw	NW	NW	NE	E	E.	sw	NW	NE	NW	w	sw
Kincardine, ,,	s	S	s	NW	N	NE	E	SE	SE	sw	w	s	} .	sw	w
Saugeen, ,,	S	S	sw	NW	N	N	C	SE	SE	sw	W	C	sw	sw	w
Little Current,,	O			N			Е			o			s		
Fort Garry, Man.	E	N	N	C	E	s	SW	W	W	sw	NW	NW	N	N	N

Table B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich "

0 43 p.m.

4 25 p.m. 10 50 p.m. 9 43 p.m. 4 08 a.m. (of next day.)

Oleenwich "	0 40 p.m.				7 40	, Р.ш	•		* 0	0 a.m	. (01	Heat	uay.		
Stations.	27th	Nover	nber.	28th	Nove	nber.	29th	Nove	nber.	30th	Nover	nber.	1st	Decen	ber.
Sydney, N.S.	5	8	17	13	2	0	6	16	21	8	2	6	13	2	1
Halifax, ,,	2	7	11	6	9	1	11	33	14	15	11	13	13	4	4
Charl'town, PEI.	9	15	15	8	3	2	17	28	11	10	11	16	10	4	13
Chatham, N.B.	1	13	11	7	0	2	11	15	5	7	8	7	4	3	2
Father Point, ,,									١.,						•
Montreal, ,,	27	26	14	8	5	20	10	5	22	5	20	2	15	17	12
Ottawa, Ont.	7	10	10	6	3	10	8	10	15	4	4	0	4	2	5
Kingston, "	24	3	0	0	6	8	0	7	0	0	0	2	6	19	17
Toronto, "	4	7	1	6	10	7	2	11	8	3	7	4	9	11	14
Port Dover, ,,	16	9	4	9	10	13	12	13	10	13	6	0	20	9	12
Port Stanley, ,,	23	9	9	6	6	3	15	20	20	13	7	8	11	21	9
Kincardine, ,,	18	13	9	4	3	3	29		20	12	12	10	15	19	10
Saugeen, ,,	13	7	6	3	0	2	17	23	20	2	7	6	14	23	10
Little Current,,	30			1	.		14			0			15		
Fort Garry, Man.	4	8	8	3	5	3	4	4	0	4	10	5	8	4	9
Stations.	2nd	Decen	nber.	3rd	Decen	aber.	4th	Decen	iber.	5th	Decen	ber.	6th	Decen	iber.
Sydney, N.S.	1	4	7	3	7	11	4	10	11	7	2	1	6	3	2
Halifax, ,,	3	8	4	6	13	8	10	13	14	9	1	4	7	0	3
Charl'town, PEI.	8	14	6	18	6	4	5	18	16	9	3	5	4	0	0
Chatham, N.B.	0	3	1	4	3	8	10	13	6	1	1	1	3	4	3
Father Point, Q.															
Montreal, ,,	11	8	2	20	20	11	5	9	7	5	5	11	5	6	6
Ottawa, Ont.	0	6	2	9	20	13	5	3	0	0	0	0	3	3	0
Kingston, ,,	. 0	8	23	13	6	11	3	0	0	2	0	0	4	0	0
Toronto, ,,	4	3	14	8	16	15	9	3	8	0	3	4	2	3	3
Port Dover, ,,	0	16	21	9	11	15	5	3	5	12	6	0	4	8	0
Port Stanley, ,,	8	9	18	18	18	15	8	18	21	20	3	1	18	11	18
Kincardine, ,,	4	15	22	17	16	18	3	6	8	13	8	6		9	12
۸. ا	!	9	17	13	7	1	0	9	6	4	4	0	1	3	4
Saugeen, "	4	ש				1	,	i		ı,	1		- 1	- 1	
Little Current ,.	0			13			3			0	.		5		
		. 18	. 10		13	17	3 10	5	5	0 10	. 8	. 9			2

Table A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 4 25 p.m. 7 25 a.m. 10 50 p.m. Greenwich 0 43 p.m. 9 43 p.m. 4 08 a.m. (of next day.) 10th December. 11th December. Stations. 7th December. 8th December. 9th December. SW swsw SE SE SE Sydney, N.S. SE S swNE NE SW w \mathbf{S} SW sw w W N N NE \mathbf{s} Halifax, SE C NW N N W w W w w w 8 Charl'town, PEI. \mathbf{E} N N NE N N w SW 5 NW \mathbf{E} \mathbf{C} N sw W C Chatham, N.B. NE N O N N N O 8 C C Father Point, Q. sw Montreal. sw W swW w SW W NW w NE NE SE S \mathbf{E} Ont NW NW N SW W \mathbf{C} Ottawa. O w W NE \mathbf{E} E N 3 NW sw O w w C sw w W \mathbf{C} Kingston, \mathbf{C} NW NW W se8 NW w Toronto. W NW NW w SW swSW W w sww SW W sw swsw SW NW NW W w W S W 8 W Port Dover. C NW NW NW Port Stanley. " sw W sw W SW W NW NW NW SW SW W NW SW NW NE \mathbf{E} SW w w W W NW NW W Kincerdine. N E N sw swNW SE w NW \mathbf{E} SW NW:NW NW Saugeen. N 8 SW Little Current ,, N \mathbf{C} W NW NW NWNW sw SW Fort Garry Man. S g S N N NW NW W NW NW Ø 16th December. Stations. 12th December. 13th December 14th December. 15th December. N NE NE Sydney, N.S. W W W W W SW SE S SW NW NWINW NW w W W NW w NE s 8WN NW NW NW NW NW Halifax. Charl'town, PEI. W w sw W NW NE Ν N w w Ń N N N N w w C C C swSW swSW \mathbf{C} N NW Chatham, N.B. SW Father Point, Q. NW w S W NENE N N N W W 8 \mathbf{S} SENE Montreal. C NE \mathbf{C} NE NW NE Ottawa. Ont. NW \mathbf{E} NE NW N NW \mathbf{C} C \mathbf{C} C NE NE NE NE N N N \mathbf{E} swSW \mathbf{C} S Kingston, \mathbf{C} sw W SE Toronto. N W W \mathbf{C} NE N N NW NW N SW SWHW SW W C \mathbf{E} N \mathbf{N} NW NW NW ß S Port Dover. 8 NW NE E NW ΝĒ SW SW $B\mathbf{E}$ SE SW NW N NWNW N Port Stanley, ,, \mathbf{C} SW W E SE S SW Kincardine. NW N NE ME \mathbf{E} SE SE S w sw SE N SE \mathbf{s} S SE SW NW S NE E E S Sangeen, Little Current .. NE NE N SE S N N Fort Garry, Man. SW NE N N NE N SE S S 8 SE NE C

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TABLE B .- A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich "

4 25 p.m.

10 50 p.m.

9 43 p.m. 0 43 p.m. 4 08 a.m. (of next day.)

Stations.	7th	Decem	ber.	8th	Decem	ber.	9th]	Decen	ber.	10th	Decen	iber.	11th	Decen	ibe
Sydney, N.S.	1	14	15	3	1	14	19	4	5	15	2	1	2	5	5
Halifax, ,,	6	0	12	10	10	20	13	1	4	5	6	5	2	5	7
Charl'town, PEI.	3	6	10	8	23	29	18	5	14	5	5	6	2	4	15
Chatham, N.B.	1	6	0	9	14	16	0	8	0	0	7	0	0	3	3
Father Point, Q.						•		•							•
Montreal, ,,	2	7	15	4	19	11	12	18	21	5	6	13	21	15	9
Ottawa, Ont.	0	18	4	10	4	3	3	6	20	4	4	2	9	10	0
Kingston, "	0	0	5	4	3	4	19	4	6	0	1	7	15	3	0
Toronto, ,,	3	17	13	10	5	20	13	23	4	7	4	8	15	6	5
Port Dover, "	0	14	16	11	12	24	18	13	8	5	12	10	9	15	5
Port Stanley, ,,	4	18	14	15	24	21	30	15	12	5	9	3 3	45	18	12
Kincardine, ,,	15	13	8	5		14	20	21	13	12	15	28	23	15	20
Saugeen, ,,	16	7	5	2	6	16	19	16	14	11	2	26	20	3	13
Little Current,,	25			0			24			1			15	,	••
Fort Garry, Man.	8	24	20	10	21	14	4	9	7	9	15	7	0	6	3
Stations.	12th	Decer	nber.	13th	Dece	nber.	14th	Dece	mber.	15th	Dece	mber.	16th	Decer	nber.
Sydney, N.S.	14	13	16	11	16	5	3	12	5	12	7	8	18	15	13
Halifax, ,,	7	9	4	14	1	2	15	12	30	21	30	30	20	12	24
Charl town, PEI.	8	11	10	8	8	1	13	18	25	13	13	16	15	8	10
Chatham, N.B.	1	3	4	2	2	Q	9	14	14	5	11	3	0	0	0
Father Point, Q.				.		.									
Montreal, ,,	8	16	3	8	12	18	30	14	15	15	25	8	10	2	4
Ottawa, Ont.	8	0	0	2	9	6	10	10	4	0	0	0	4	6	4
Kingston, ,,	0	0	0	4	5	13	8	1	1	2	1	16	9	0	12
Toronto, ,,	7	8	7	0	14	12	14	4	5	5	4	18	4	10	9
Port Dover, ,,	8	6	0	5	12	9	10	7	8	7	12	18	14	13	18
Port Stanley, ,,	12	6	6	4	3	14	15	15	2	8	9	15	15	20	20
Kincardine, ,,	13	9	13	0	9	11	11	11	9	9	13	13	12	16	18
Saugeen, ,,	10	5	2	5	1	14	8	6	7	8	10	4	6	14	15
Little Current,,	5	.		4		!	12			13			3		
Fort Garry, Man.	^4	8	9	4	2	1	8	16	10	12	3	20	16	8	0

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TABLE A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m. 10 50 p.m.

4 68 a.m. (of next day.)

Stations.	17th	Dece	mber.	18th	Dece	mber.	19th	Dece	mber.	20tl	Dece	mber.	21st	Dece	mber.
Sydney, N.S.	NE	N	sw	SE	c	\mathbf{w}	w	sw	w	w	sw	C	NE	NE	NE
Halifax, ,,	NW	$ \mathbf{w} $	s	w	w	w	w	w	w	w	E	N	NE	N	NE
Charl'town, PEI.	NW	w	C	SE	NW	NW	sw	w	w	sw	s	w	N	N	N
Chatham, N,B.	sw	E	E	N	w	sw	sw	w	sw	sw	C	N	N	NW	sw
Father Point, Q.					١.							.			
Montreal, ,,	E	NW	NW	w	w	·w	NW	NW	w	NE	NE	NE	NE	E	s
Ottawa, Ont.	NE	w	w	w	C	C	w	w	C	N	N	N	N	C	NE
Kingston, "	sw	N	NW	w	sw	w	w	\mathbf{c}	C	NE	NE	NE	NE	SE	sw
Toronto, ,,	w	w	w	w	sw	w	sw	sw	sw	w	N	N	c	s	s
Port Dover, "	sw	NW	NW	w	sw	sw	sw	S	w	w	N	N	s	8	s
Port Stanley, "	w	NW	NW	NW	w	w	w	sw	SE	NW	NW	NW	N	s	SE
Kincardine, ,,	w	NW	NW	sw	w	w	w	sw	s	N	NE	SE	SE	B	8
Saugeen, "	NW	NW	NW	sw	w	w	N	w	S	N	N	O	SE	s	sw
LittleCurrent ,,	NW			sw			NW	•		NE			c		
Fort Garry, Man.	sw	sw	sw	C	NW	NE	N	NW	E	sw	s	s	N	NW	O
Stations.	22nd	Decen	aber.	23rd	Decen	aber.	24th	Decer	nber.	25th	Decer	nber.	26th	Decer	nber.
Sydney, N.S.	NE	SE	ន	SE	E	w	sw	SE	E	w	w	w	w	w	sw
Halifax, ,,	NW	c	s	SE	NW	w	sw	SE	w	w	W	w	w	w	w
Charl'town, PEI.	w	ន	s	SE	NW	w	s	E	N	'NW	NW	NW	NW	w	S
Chatham, N.B.	ន	ន	S	С	N	w	. c	С	NW	NW	W	w	W	8	sw
Father Point, Q.	. !	. !				.	.								•
Montreal, ,,	ន	S	sw	w	w	S	w	w	w	w	w	SE	SE	SE	sw
Ottawa, Ont.	E	NE	С	С	SE	C	8	w	w	w	sw	NE	NE	NW	E
Kingston, "	ន	sw	sw	W	sw	s	sw	w	w	C	SE	E	ន	sw	O
Toronto, "	sw	sw	sw	w	sw	sw	w	w	w	W	ន	SE	sw	sw	W
Port Dover, "	ន	sw	sw	sw	s	s	sw	w	sw	w	SE	s	s	s	sw
Port Stanley, ,,	sw	W	sw	sw	SE	w	sw	w	w	N	SE	SE	sw	sw	sw
Kincardine, ,,	ន	w	w	S	s	w	w	w	NW	w	SE	s	sw	sw	E
Saugeen, "	S	sw	w	sw	s	sw	sw	w	NW	sw	SE	S	sw	w	\mathbf{c}
LittleCurrent ,,	s			C			w			NE	.	.	w	.	
W + C Mon									,				i	1	
Fort Garry, Man.	ន	S	SE	W	NW	NW 23	C	s l	S	E	NW	sw	sw	sw	SW

Table B.—A Supplement to Tables I and II, shewing the Velocity of the Wind, in miles, per hour at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m.

Greenwich ,, 0 43 p.m.

4 25 p.m.

9 43 p.m.

10 50 p.m.

4 08 a.m. (of next day.)

Stations.	17th	Decen	ber.	18th	Decen	ber.	19th	Decen	ıber.	20th	Decem	ber.	21st 1	Decem	ber.
Sydney, N.S.	15	8	3	3	0	10	16	7	13	6	5	o	14	19	14
Halifax, ,,	15	4	1	12	20	27	4	15	4	5	1	7	20	10	11
Charl'town, PEI.	11	7	0	6	14	13	5	6	8	6	5	4	19	20	10
Chatham, N.B.	1	1	3	1	11	6	2	6	5	1	0	6	8	5	1
Father Point, Q.		.	•					. }		.			.	.	•
Montreal, ,,	6	13	30	29	9	15	21	18	10	8	8	15	18	7	7
Ottawa, Ont.	4	16	16	8	0	0	6	9	0	6	4	4	2	0	4
Kingston, "	11	8	9	4	12	8	6	0	0	1	16	2	3	2	7
Toronto, "	8	22	20	8	16	14	11	7	4	5	12	5	0	13	5
Port Dover, "	16	23	20	10	24	15	6	6	3	4	18	12	6	12	17
Port Stanley, "	20	21	23	18	27	21	18	15	9	9	14	5	2	9	8
Kincardine, "	22	30	18	20	27	15	21	8	6	24		6	7	12	10
Saugeen, ,,	15	21	13	10	12	11	8	3	1	1	1	0	8	1	5
Little Current,,	16			13			1			15			0		•
Fort Garry, Man.	17	21	16	0	5	14	7	5	3	20	16	12	15	9	0
Stations.	22nd	Decen	ber.	23rd	Decen	aber.	24th	Decer	nber.	25th	Dece	ober.	26th	Decen	aber.
Sydney, N.S.	5	2	1	4	3	12	5	8	15	23	18	20	16	11	11
Halifax, ,,	3	0	7	6	15	9	4	7	7	20	2	10	10	3	1
Charl'town, PEI	3	11	19	17	19	4	3	8	12	9	13	14	13	4	5
Chatham, N.B.	6	6	3	0	3	2	0	0	9	10	13	9	4	4	1
Father Point, Q		.				•								. '	١.
Montreal, ,,	8	15	14	13	12	15	11	18	25	23	18	4	8	3	11
Ottawa, Ont	6	3	0	0	5	0	12	2	14	12	2	6	6	6	2
Kingston, "	19	8	4	3	6	7	5	10	12	0	1	1	16	5	0
Toronto, "	9	7	5	6	10	16	15	20	18	6	6	9	4	2	2
Port Dover, ,,	18	7	12	7	16	15	14	15	12	5	5	9	8	6	3
Port Stanley, ,,	15	15	24	24	21	33	30	24	27	2	26	18	12	15	1
Kincardine, ,,	8	12	12	12	17	21	23	25	15	8	9	10	10	2	1
Saugeen, ,,	2	11	5	4	7	25	18	24	14	5	8	14	6	4	(
Little Current,	2		.	0			20	.		4	.	1	8		.
Fort Garry, Man	. 4	8	3	3	20	12	0	8	3	5	5	2	5	12	8

Table A.—A Supplement to Tables I and II, shewing the Direction of the Wind at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil Greenwich ,,	time 7	25 43	a.m. p.m.	4 28 9 43	5 p.m. 3 p.m.	10 4	50 p.n 08 a.m	n. . (of next	· t day).
			28th Decem						
	1 1	1	1 1	1	1 1	 i	,	1	1

Stations.	27th	Dece	nber.	28th	Dece	nber.	29th	Dece	nber.	30th	Decei	mber.	31st	D c cen	ber.
Sydney, N.S.	NW	w	w	sw	SE	SE	sw	w	w	w	w	w	w	w	w
Halifax, ,,	C	C	w	SE	SE	s	w	w	NW	NW	w	w	w	w	w
Charl'town, PEI.	w	w	sw	s	SE	s	NW	sw	NW	NW	w	w	w	NW	NW
Chatham, N.B.	C	c	C	C	s	C	C	w	w	w	w	w	W.	w	w
Father Point, Q.															
Montreal, ,,	w	SE	SE	s	w	w	w	NW	NW	w	NW	W	w	w	W
Ottawa, Ont.	С	NE	NE	NE	w	w	w	w	w	w	w	w	w	SE	C
Kingston, ,,	O	E	s	s	σ	С	w	·w	NW	NW	NE	NE	C	w	sw
Toronto, ,,	N	E	SE	С	w	w	w	W	w	w	NW	N	N	σ	C
Port Dover, "	NW	E	s	8	w	w	W	w	w	w	w	N	N	ន	w
Port Stanley, .,	E	E	SE	W	NW	NW	NW	NW	NW	NW	NW	NW	NE	NE	w
Kincardine, ,,	SE	8E	S	N	NW	w	w	w	w	w	N	E	SE	w	SE
Saugeen, ,,	SE	s	S	s	σ	w	w	w	w	NW	и	NE	SE	w	B
LittleCurrent, ,,	Œ			W			w			NW			C		
Fort Garry, Man.	w	N	N	w	w	w	NW	С	sw	w	8	sw	ន	s	8

Table B.—A Supplement of Tables I and II, shewing the Velocity of the Wind, in miles per hour, at various Stations in the Dominion of Canada, at the same absolute times, as follows:

Toronto civil time 7 25 a.m. Greenwich , 0 43 p.m.

4 25 p.m. 9 43 p.m.

Stations,	27th	Decer	nber.		Decer		29th	Decen	aber.	!		nber.	ļ	Decen	
Sydney, N.S.	2	2	8	. 1	7	13	5	17	20	28	26	20	18	19	19
Halifax, ,,	0	0	1	1	10	8	6	6	33	28	10	. 20	20	20	15
Charl'town, PEI.	3	4	3	1	18	3	5	9	24	20	21	24	20	13	16
Chatham, N.B.	0	0	0	0	6	0	0	20	16	12	15	10	14	6	11
Father Point, Q.							. !								
Montreal, ,,	12	4	11	222	13	15	14	12	25	27	19	19	30	27	31
Ottawa, Ont.	0	2	6	2	3	4	28	16	10	6	10	8	8	3	0
Kingston, ,,	0	2	9	7	0	0	15	22	10	4	13	8	0	2	2
Toronto, ,,	7	8	3	0	1	7	21	21	15	18	14	12	9	0	0
Port Dover, ,,	2	7	15	4	4	5	12	15	11	12	12	11	10	7	8
Port Stanley, ,,	5	16	13	3	8	14	35	23	23	17	13	17	1	2	1
Kincardine, ,.	8	9	12	8	8	20	27	18	17	26	10	10	4	9	1
Saugeen, "	10	5	. 1	13	0	6	14	16	17	18	16	3	1	8	3
Little Current ,,	1			6			15	•.		11			0		
Fort Garry, Man.	3	9	8	3	7	4	3	0	3	3	5	3	8	24	25

Table III.—Shewing for some of the Stations named in Tables I and II, and for each the year, of the reduced Barometer and of the Temperature of the Air, and also the

BAROMETER

Stations.	January.				February	•	March.			
Sydney,	in. 30·104	in. 30·100	in. 30·078	in. 29·925	in. 29.900	in. 29·918	in. 29 741	in. 29·737	in. 29:748	
Halifax	30.079	30.067	30.050	29·947	29.931	29 935	29 · 757	29 · 731	29.745	
Charlottetown:	30 · 091	30.080		29·989	20.950		29.753	29·78 8	2 9·731	
Chatham		30.094			29· 9 77			29 · 730		
Father Point	30.077	30.043	30 031	30.054	30.027	30.021	29.774	29.716	29.725	
Quebec	30.139	30.098	30.116	30,154	3 0·095	30.100	29 · 901	29.801	29 835	
Montreal				3 0·167	30.112	30.130	29.927	2 9·862	29.889	
Ottawa	30.108	30.080	30.126	30 176	30.131	30.150	29.959	29.892	29 930	
Brockville	30.107	30.075	30.120	30 165	30.126		29.954	29.911		
Kingston	30.135	30.114	30.165	30.210	30 · 161	30.178	30.031	29.972	30.013	
Toronto	30.089	30.074	30.123	30.157	30.122	30.138	30.000	29.948	29 · 991	
Port Dover	30 101	30.083	30:118	30.147	30.114	30.135	30.016	29.965	30.003	
Port Stanley	30.112	30.098	30.137	30.161	30.125	30.145	30.039	29 995	30.037	
Saugeen	30.056	30.088	3 0·091	30.176	30.167	30.169	30.048	30.033	3 0·038	
Fort Garry	30.140	30.134	3 0·162	30:101	30.063	30.067	30.113	30.068	30.091	

RESULTANT DIRECTION.

	0	0	0	0	6	0	0	0	4
Sydney	S 62 W	S 82 W	S 62 W	N 77 W	N 47 W	N 77 W	8 81 W	8 74 W	S 54 W
Halif.ax	N 88 W	S 39 W	S 32 W	N 47 W	N 65 W	N 53 E	N 79 W	N 86 W	8 88 W
Cherettetown	S 60 W	S 40 W	S 30 W	N 71 W	N 70 W	S 69 W	S 89 W	S 63 W	877 W
Chatham	877 W	S 82 W	N 88 W	N 71 W	N 59 W	N 79 W	N 75 W	N 88 W	S 74 W
Father Point	N 88 W	N 84 W	N 60 W	N 77 W	S 69 W	8 76 W	8 67 W	S71 W	N 78 W
Quebec	N 48 E	N 37 E	N 14 W	S 78 W	S 80 W	873.W	S 64 W	8 82 W	S 72 W
Montreal	-			N 60 W	S 69 W	N 54 W	N 84 W	876 W	S 68 W
Ottawa	N 29 E	N 52 W	N 81 W	N 70 W	S 84 W	N 81 W	N 76 W	S 87 W	N 86 W
Brockville									
Kingston	8 11 W	S 52 W	8 72 W	S 38 E	8 69 W	N 9 W	N 89 W	877 W	S 87 W
Toronto	N 64 W	N 83 W	N 27 W	N 92 E	N 65 W	N 22 W	N 57 W	N 64 W	N 70 W
Port Dover	S 42 W	S 49 W	S 78 W	S 85 W	872 W	N 65 W	8 89 W	8 67 W	8 84 W
Port Stanley	N 73 W	N 60 W	N 46 W	N 14 E	N 36 W	N 46 W	N 49 W	N 75 W	N 46 W
Saugeau	S 87 W	N 39 W	870 W	S 87 W	N 84 W	S 86 W	N 83 W	N 66 W	N 55 W
Fort Garry	N 85 W	N 63 W	8 80 W	S 33 W	S 44 W	S 62 W	N 63 W	N 56 W	N 65 W

of the three times of observation given in those Tables, the means for each month and for Resultant Direction and Resultant Velocity of the Wind for each month and for the year.

TEMPERATURE.

Stations.		January		1	February.			March,	
Sydney	24.2	25.0	24.7	17·3	17.8	15.1	29.8	29.1	25·1
Halifax	25.3	27.5	27.2	17.4	22.7	17:3	30.2	33·4	28.3
Charlottetown,	21.1	28-8	١.	14.0	17:4		2 6·0	29.3	26 · 1
Chatham	13.2	19.6	17.2	7.4	18.6	10.9	21.8	31.8	24 ·0
Father Point	12.3	16.4	15.8	9.2	13.8	11.6	18.9	24.6	20.5
Quebec	12.1	15.4	11.2	6.9	15.3	11.1	16.7	25 · 2	20.1
Montreal	•			12.3	19.0	15.6	20.9	28.3	23.8
Ottawa	13.6	18.9	14.6	7.1	19.4	12.5	18.2	28.8	22.2
Brockville	15.7	22.6	18.0	10.8	20.8		24.0	29.5	
Kingston	19.4	23.5	19:4	13.5	22.1	17.4	23.4	30.0	25 18
Toronto	23.7	27 · 7	23.6	19.4	26.7	21.4	26.3	32.9	27.8
Port Dover	24.9	27.7	24.3	20.5	27 · 4	22.9	27.2	34.6	29 · 2
Port Stanley	24.8	27.4	23.8	20.8	27.6	23 ·8	27.3	34·1	28.5
Sangeen.	22.8	24.3	22.4	18·2	24 · 1	19.2	24.6	2 8·5	24 . 5
Fort Garry.	-9.5	1·1	-6.2	3.9	7.0	1.5	1.3	16.9	9.0
		RES	ULTAN	T VEIA	OCTY.		<u> </u>		
Sydney	3.4	2.5	4.0	3.7	4.5	3.8	4.5	3.8	4.4
Halifax	2.0	0.6	2.1	1.4	2.0	1.1	3.0	2.0	2.4
Charlottetown	4.2	1.0	2.9	2.8	3.0	3 1	5.2	3.5	3.3
Chatham.	1.9	1.8	1.3	3 4	4.4	2.2	4.2	4.7	2.5
Father Point	2.3	1.9	2.4	2.4	3.4	5.2	8.2	6.2	6.8
Quebec	3.4	4.4	0.2	2.0	4.8	4.2	3.2	2.5	3.3
Montreal				3.9	4.0	5.0	4.0	7.8	6.4
Ottawa	1.3	2.0	1.3	2.2	2.4	2.7	4.4	6.0	5.5
Brookville									
Kingston.	1.7	1 2.9	1.9	0.7	3.4	0.6	3.4	5·3	5.0
Toronto	2.8	4.6	3.0	1:9	1.8	3.0	4.3	9· 3	6.5
Port Dover	3 ·5	4.4	1.6	1.1	1.9	2.4	5.3	8.1	4.7
Port Stanley	1.8	2.4	2.6	0.2	1.3	1.0	2.9	3.7	3.2
Saugeen	0.8	4.5	1.9	1.2	2.8	0.9	2.5	7.8	7:3
Fort Garry	2.4	1.9	1.2	1.3	2.8	3.8	3.8	7.6	3·S

TABLE III.—Shewing for some of the Stations named in Tables I and II, and for each of the year, of the reduced Barometer and of the Temperature of the Air, and also the BAROMETER.

Stations.		April.			May.			June.	
Sydney	in. 29·923	in, 29·872	in. 29·908	in. 29·911	in. 29·894	in. 29·915	in. 29·906	in. 29:904	in. 29:925
Halifax	29.899	29.855	29.892	29.893	29.850	29.882	29 856	2 9·840	29 863
Charlottetown	29 913	29 · 874	29.892	29.893	29.867	29.883	29.894	29 · 879	29.895
Chatham		29.875			29.841			29.869	
Father Point	29 · 921	29.859	29.875	29.879	29 · 835	29.865	29.866	29.822	29.849
Quebec	30.008	28.922	29 · 950	29 · 935	29 · 855	29 · 909	29 922	2 9·849	29 884
Montreal	30 020	29· 9 70	29 · 983	29.919	29 · 854	29 891	29 · 924	29 856	29 · 898
Ottawa	30.044	29.988	30.010	29· 9 36	29.872	29.908	29 · 937	29.869	29 . 905
Brockville	30.055	30.004		29 · 957	29 · 905		29 · 957	29.903	•
Kingston	30.082	3 0·036	30.048	29 · 979	28 927	29 · 949	29.996	29 · 948	29.974
Toronto	30.094	30.024	30.049	29 965	29 917	29 · 948	29.973	29.917	29 947
Port Dover	30.093	30.032	30 052	29.978	29 · 932	29 965	29 · 982	2 9·930	29 · 959
Port Stanley	30.091	30.038	30.059	29 · 981	29 · 944	29 · 971	29 · 969	2 9·929	29.955
Saugeen	30·118	30.060	30.067	29 962	29 951	29 957	29.973	29.932	29·9 3 5
Fort Garry	30.125	30.084	30.099	29 · 966	29 · 907	29 · 938	29.864	29.818	29 · 848
		RESU	LTANI	DIRE	CTION,				
	•	0	۰	0	0	0	8	•	•
Sydney	S 69 W	871 W	N 66 W	S 84 W	1	S 58 W	S 50 W	S 12 W	S 15 W
Halifax	S 76 E	S 56 W	S 54 W	S 65 W	i	N 86 W	S 32 W	S 61 E	S 62 E
Charlottetown	N 72 W	N 41 W	S 33 W	S 39 W	S 35 W	S 49 W	N 27 W	S71 E	S 21 E
Chatham	N 39 W	w	N 75 W	N 75 W	N 56 W	N 72 W	N 52 W	N 40 W	N 35 W
Father Point	N 43 W	N 38 W	N 21 W	N 46 W	N 54 E	N7W	N 36 E	N 36 E	N 38 E
Quebec	N 67 E	S 64 W	N 25 W	N 46E	N 35 W	N 38 E	N 33 E	N 10 E	N 40 E
Montreal	N 61 W	N 82 W	N 60 W	N 13 W	S 37 W	N 58 W	S 85 W	S 74 W	N 84 W
Ottawa	N 43 W	N 82 W	N 76 W	N 55 W	S 89 W	N 67 W	N 79 W	S 84 W	N 80 W
Brockville		•							
Kingston	N 24 W	S 65 W	S 87 W	N 6 W	876 W	S 61 W	N 80 W	S 50 W	S 76 W
Toronto	N 10 W	N 72 W	N 23 W	N 10 W	N 73 W	N 47 W	N 14 W	N 64 W	N 21 W
Port Dover	N 12 W	S 88 W	N 29 W	N 69 W	S 50 W	N 55 W	N 45 W	S 39 W	N 50 W
Port Stanley	N2E	N 46 W	N 28 W	N 78 W	N 83 W	N 46 W	N 10 W	8 67 W	N 60 W
Saugeen	N 46 E	N 47 W	N 58 W	S 78 W	N63W	S 18W	S 33 W	8 63 W	N 36 W
Fort Garry	NILE	N 37 W	N 12 E	N 72 E	N 32 E	N 68 E	S 78 E	N 52 E	S 87 E

the three times of observation given in those Tables, the means for each month and for Resultant Direction and Resultant Velocity of the Wind for each month and for the year.

TEMPERATURE.

Stations.		A pril.			Мау.			June.	A
Sydney	33.4	32·5	27·3	6 49·2	47.9	38.8	51.7	52·0	44.9
Halifax	33 · 4	35.7	30.8	50.2	53.6	43.3	54 ·5	56.1	49.3
Charlottetown	29.9	34.6	29.7	46.4	51.8	43.4	51.8	55· 6	49.5
Chatham	3 0.6	37 7	28.7	46.8	56.8	42.7	52 ·7	60 1	50.7
Father Point	26:3	30.8	26 · 3	42.0	45.2	43.4	49.2	53.6	5019
Quebec.	26.0	34.0	28.0	44.7	51.9	44.1	56.5	62.7	56:3
Montreal	29.2	37 · 2	31 · 1	48.7	59.1	50.1	5 9·9	67·8	60.2
Ottawa	26.7	38.8	30.4	48.7	62.3	51.7	60.4	72.3	61.7
Brockville	32.9	36.6		51.4	58.3		62 · 2	67.2	
Kingston	30.2	37.0	31 8	49.0	57-1	49.3	59∙₹	64.8	58 7
Toronto.	31.7	38·3	31.7	51 · 8	58.8	50.0	61.5	69.3	59.1
Port Dover.	80.6	38 ·9	32 3	49.5	61.2	51.7	61.0	71.7	61.7
Port Stanley	3 1.8	38.8	31 4	51.1	59.2	49.5	63.2	71.1	60.6
Saugeen	28.5	34 ·5	28:3	50:3	53.7	46.2	58.9	63.6	56· 2
Fort Garry	19.9	33.0	24.8	45.2	6 2 ·8	50.4	56.3	72.1	60.3
		REST	JLTAN	r VELO	OCITY.				
Sydney	1.8	3·1	1.6	3.6	1.1	1.1	1.3	1.4	1.7
Halifax	0.3	2.6	2 ·5	1.0	3.8	1.0	0.4	1.2	1.0
Charlottetown.	2.4	2.0	0.3	3.4	1.5	1.3	1.2	1.1	2.2
Chatham	2.5	3.2	2.0	4.0	3.1	1.2	3.3	1.1	1.2
Father Point	3.5	3.8	5.0	1.1	2.2	0.8	1.8	2.8	4.2
Quebea	2.7	3.3	0.8	2·4	2·1	4.8	4.3	3.9	2.4
Montreal	2.0	4.8	4.2	1.3	2.8	5 2	3.0	3.4	5.4
Ottawa	6.3	5·5	2.4	3.6	2.5	1.8	3.3	5.3	1.9
Brockville	. ;				,		,		
Kingston	2.2	2.2	1.3	0.6	1.4	1.8	0.5	2.7	1.8
Toronto	4.6	5.1	4.0	2.4	3.0	3.6	3·1	3.2	2.3
Port Dover	2.8	2.1	2.7	2.5	4.0	2.6	2.3	3.3	1.5
Port Stanley	1.6	1.8	2.4	0.8	1.3	1.0	0.4	2.5	0.8
Saugeen	1.1	4.8	1·3	1.3	3.0	0.8	2.7	2.2	0.7
Fort Garry	1.5	4·1	2.2	1.8	4.1	3.9	0.2	1.2	1.3

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TABLE III.—Shewing for some of the Stations named in Tables I and II, and for each of the year, of the reduced Barometer and of the Temperature of the Air, and also the

BAROMETEB

Stations.		July.			August.		8	Septembe	r.
Sydney	in. 30·021	in. 29 992	in. 30·012	in. 29·991	in. 29.965	in. 29·975	in. 30.078	in. 30:031	in. 30.064
Halifax	29.994	29.959	29.979	29 952	29 · 911	29.940	30.031	80.003	30.025
Charlottetown	30.013	29 974	29 989	2 9·984	29 950	29 967	3 0·078	30.048	30*064
Chatham		29.937			29.928			30.021	••
Father Point	29 921	29:876	29:891	29 938	29 · 897	29.914	30 047	29 · 998	30.009
Quebec	29 964	29.902	29 932	30.001	29.940	29 985	3 0 093	30.030	30.059
Montreal	29.959	29.968	29.923	30.007	29:954	29.991	30 077	30.023	30.040
Ottawa	29.973	29.913	29.930	30 · 016	29.957	30.008	30 074	30.000	30.048
Brockville	29.976	29.936		30.030	29 · 978		\$ 0·089	30.032	~ ■
Kingston	30.010	29.951	29 · 959	30.058	30.015	80.033	30 · 108	30.061	30 ·086
Toronto	29 985	29 · 929	29.950	30.039	29 988	30.029	3 0·070	39.012	30.033
Port Dover	29.994	29 945	29 960	30.044	29.978	30.020	30.066	30.019	30.050
Port Stanley	29.989	29·950	29.967	30.035	29.988	30.026	30.068	30.024	30.048
Saugeen	29.984	29.951	29 960	3 0·057	30.010	30·03 8	30.054	30.015	30.024
Fort Garry	2 9·8 72	29.808	29 825	29.960	29.906	29 929	29.920	29:847	29.894

RESULTANT DIRECTION.

Sydney	9 53 W	S 53 W	8 36 W	8 40 W	S 48 W	S 24 W	S 21 E	S 87 E	8 40 W
Halifax				N 89 W		8 57 W		8 25 W	
Charlottetown		· i	_	8 55 W	j		8 68 W		
Chatham)	8 42 W	i l		B 78 W			
Father Point.:	8 66 W	814 W	8 17 W	8 65 W	8 55 W	8 48 W	8 59 W	8 50 W	8 57 W
Quebec	N 10 E	8 66 W	S 78 E	N 84 W	N 53 W	N 71 W	N 26 E	N 18 W	NBE
Montreal	S 26 W	811 W	8 75 W	8 69 W	N 74 W	N 88 W	8 51 W	8 65 W	841 W
Ottawa	N 64 W	8 44 W	S 33 W	N 45 W	884 W	N 49 W	N 86 W	8 32 W	N 11 W
Brockville		.							
Kingston	S 17 W	8 46 W	S 16 W	N 78 W	S 66 W	81 W	8 13 W	S 40 W	S 24 E
Toronto	N 22 W	8 35 W	N 52 W	N 25 W	S 13 W	N 11 W	N 60 W	S 15 E	N 63 W
Port Dover	N 51 W	87 W	N 81 W	N 26 W	86E	N 12 W	S 74 W	S 31 W	N 85 W
Port Stanley	N 67 W	N 78 W	N 72 W	N 43 E	S 52 W	N 9 W	,		
Saugeen	S 56 W	ı	i		i i	' i	N 68 E	S 88 W	N 80 W
Fort Garry	N 84 W	8 78 W	N 81 W	N 50 W	N 72 W	S 70 E	S 24 W	S 64 W	8 31 W

Saugeen

Fort Garry

the three times of observation given in those Tables, the means for each month and for Resultant Direction and Resultant Velocity of the Wind for each month and for the year.

(1) (2)	CD 2370	4 003	TT1 T2
T P. IV	M PER	A 1 1	JKK.

-			TEMPI	ERATUE	RE.				
Stations.		July.			August.		8	September	
Sydney	65.1	65.6	55.1	63.3	63.7	o 56·1	56.8	57.6	50·1
Halifax	63.5	66.4	57:9	61.9	64.8	56.9	57.5	60.0	53.8
Charlottetown	61.9	68-6	60.4	61.4	67.4	59.4	56.8	60.5	55.0
Chatham	63.0	71.9	60.4	6 0·2	68·1	56.4	54.9	63.2	53.4
Father Point	57 · 7	60.3	59· 2	56.8	58.6	57·1	50.5	52·8	50.9
Quebec	64.9	72.0	63.8	62 · 4	70.9	60.6	56.1	63·5	55.7
Montreal	6615	74.1	66.8	63.0	73.4	64 0	58· 7	66.8	59.8
Ottawa	65.7	77 · 7	65·8	61 · 7	77 · 3	62.9	57.1	70.4	59· 2
Brockville	68.7	72.4		65.2	73.6		60.4	68.7	
Kingston	65.4	71.5	65.6	64.5	72.7	63·4	60·5	68-6	60.3
Toronto.	66.6	73.7	64.5	65.0	74·3	62.4	61.3	69.2	60.5
Port Dover	64.7	74 · 7	65.9	61.8	77.5	63.7	60.0	71.3	60.6
Port Stanley	64.8	74.6	64.0	61.1	76.0	61.5	58.1	70.1	59.3
Saugeen	62.8	69.0	59.3	61·1	67 · 7	56.7	57·8	66.9	57:8
Fort Garry	58.7	76·8	64.2	56.8	74.6	62.3	45.9	66.7	52.5
The second secon		RES	ULTAN	T VEL	OCITY.			l	
Sydney	3.0	3.2	1.9	2.7	1.8	1.7	0.2	0 9	1.8
Halifax	1.4	3 ·6	0.8,	0.2	1.9	0.8	1.1	0.2	0.5
Charlottetown	5.3	2.7	4.2	3.2	1.7	2.2	1.4	0.8	2.0
Chatham	3.5	2.5	2.5	2.8	1.8	1.2	1.8	1.7	1.2
Father Point	1.9	0.8	2.2	2.0	2 ·0	1.8	1.6	0.6	2.6
Quebec	1.8	1.3	0.8	0.8	2:3	2 ·0	3.8	1.6	1.8
Montreal	2.2	2.8	5.6	3.3	2.4	3.9	3.7	2.9	4.3
Ottawa	1.4	4.3	1.0	2.5	2.7	2.1	0.8	2.0	0.3
Brockville									
Kingston	0.2	2.3	1.4	0.6	0.8	0.8	1.8	2.8	1.3
Toronto	3'1	2.1	2.0	3.5	2.2	2.3	1.6	1.4	0.9
Port Dover	2.4	3.3	1.6	2 · 4	3.1	1.9	1.3	2.4	1.9
Port Stanley	2.5	3.0	2.2	2 1	1.3	2.2			
	1	Į.	:		1	i	i	ļ.	l

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1.5

TABLE III.—Shewing for some of the Stations named in Tables I and II, and for each of the year, of the reduced Barometer and of the Temperature of the Air, and also the

BAROMETER.

Stations	October. November.								December.			
Sydney	in. 29·963	in. 29·944	in. 29 953	in. 29·985	in. 29·983	in. 29·981	in. 29 920	in. 29 878	in. 29 849			
Halifax	29.972	29 · 937	29 947	30.003	29 982	29.996	29 947	29.894	29-911			
Charlettetown	29 967	29 · 939	29 941	30.008	29 996	29·9 97	29 975	29.917	29.920			
Chatham		29.913		30.011	29 973	30.002	80.002	29 951	29 · 967			
Father Point						. 1						
Quebec	3 0·025	29 972	29 994	30 · 034	30 · 029	30 · 057	30 · 055	30.055	30.067			
Montreal	30.037	29 985	30.012	30.065	30 053	30 · 072	30.075	30.081	30.086			
Ottawa	8 0·046	30.000	30.040	80 063	30.032	30.069	30.055	30.073	30.087			
Brockville,	30.079	30 042		30 112	30.081		30.123	30.111				
Kingston	30.097	30.070	30.087	30:123	30.100	20.119	30 · 119	30.113	30· 13 0			
Toronto	30.080	30 046	30 069	30.092	30.0//0	30 095	30.009	30.092	30.099			
Port Dover	30.093	30.043	30.074	30.091	30.077	30.101	30.110	30.100	30.105			
Port Stanley	30.088	30.053	30.079	30.097	30.084	30·104	30 · 121	30 · 107	30 · 120			
Saugeen,	30.077	30.041	30.046	30.063	30.033	30.056	30.051	30 044	30.036			
Fort Garry	30.075	30 002	30.054	30.048	30.002	30.030	30.064	30.071	30.081			

RESULTANT DIRECTION.

Sydney	S 61 W	8 62 W	S 44 W	8 82 W	8 72 W	8 72 W	N 83 W	S 80 W	S 74 W
Halifax	,			N 80 W	1)	}	N 76 W	
Charlottetown	1				İ			N 56 W	
			ĺ	1			•		
Chatham	,	9 91 W	8 52 W	8 55 W	871 W	BNW	N 64 W	N 83 W	N 70 W
Father Point						٠ ا			•
Quebec	876 W	885 W	N 71 W	8 55 W	8 83 W	N 70 W	N 69 W	884 W	N 81 W
Montreal	582 W	8 80 W	8 89 W	8 65 W	876 W	8 83 W	8 85 W	N 86 W	885 W
Ottawa	878 W	8 79 W	N 51 W	w	8 61 W	8 86 W	N 80 W	N 79 W	N 60 W
Brookville		•							
Kingston	S 82 W	S 73 W	N 50 W	S 36 W	8 70 W	847 W	S 43 W	8 65 W	8 47 W
Terento	N 81 W	N 75 W	N 81 W	N 81 W	N 86 W	S 83 W	N 88 W	S 88 W	8 78 W
Port Dover	S 89 W	S 74 W	N 82 W	S 52 W	8 64 W	8 65 W	S 49 W	S 63 W	S 56 W
Port Stanley	N 64 W	S 82 W	N 67 W	8 66 W	S 64 W	8 79 W	S 83 W	S 85 W	8 88 W
Saugeen	N 60 W	N 81 W	N 81 W	S 83 W	N 83 W	S 86 W	S 79 W	871 W	872 W
Fort Garry	834 W	N 64 W	875 W	N 65 W	N 58 W	N 72 W	8 75 W	8 78 W	849 W

the three times of observation given in those Tables, the means for each month and for Resultant Direction and Resultant Velocity of the Wind for each month and for the year.

TEMPERATURE.

			TEMPE	10 41 0 10					
Stations.		October.		1	November	•	1	December	
Sydney	52.1	50.4	46.4	37·5	36.8	35 6	27 0	28.2	27.7
Halifax	48.4	50.3	45.6	3 5·6	37 · 8	34.9	24.8	27.7	25.5
Charlottetown	49.0	51.5	47.7	34 ·1	36.1	34 3	20 3	23.4	21.7
Chatham	43.1	51.6	43.4	28.2	34.3	29.9	9.3	16.7	11.2
Father Point	•								٠.
Quebec	42.7	50.0	44.4	28.2	31 · 0	27 · 1	10.5	15.0	12·1
Montreal	43.7	51.6	46.3	29.7	32.7	29.9	13.6	15·5	14:1
Ottawa	41.7	51.4	44.0	28.1	33.5	28.6	11.2	15.7	12.2
Brockville	44.7	50.0		29·4	34 7		17.1	21 · 2	
Kingston	45.8	50.7	46.4	33.1	3 6·7	34 · 1	21.7	24 9	23.0
Teronto	44.5	51.2	45.6	32.6	37.9	32.4	24 · 2	27 · 4	25.5
Port Dover	44.1	54:0	45.7	35.3	39.9	35·3	26.2	29.8	27 · 2
Port Stanley	44.0	53.8	44.9	35.9	40.0	36.1	26.5	30.0	28 1
Saugeen	43.5	48.8	44.2	32.8	36.3	34.0	24.1	25.0	24.7
Fort Garry	34.2	53.1	40.1	9.6	19.2	11.6	2.5	7.4	3.1
·	···	RES	ULTAN	r velo	CITY.	<u> </u>			<u> </u>
Sydney	5.2	3.1	4.2	3.3	3.7	3.2	5.2	3.1	4.6
Halifax	2.3	2.6	1.8	5.2	4.3	8.6	6.4	4.2	6.3
Charlottetown	4.5	2.8	3.9	4.3	4.2	4.0	3.8	3.8	5.0
Chatham	3.5	2.4	2'7	3.1	3.0	2.6	1.8	3.2	2.7
Father Point									
Quebec.	3.2	2.8	3.1	0.4	2.9	1.6	1.0	3.6	3.4
Montreal.	7:3	9.0	8.8	8.3	7.5	5.9	7.5	6.9	6.4
Ottawa	1.0	1.9	2.1	2 ·5	2.8	1.8	2.4	3.2	2.3
Brockville.									
Kingston	2.1	2.5	1.2	5· 3	3.0	1.7	3.0	1.6	2.3
Toronto	2.6	3.9	3.3	3.2	4.0	2.6	5.2	5.2	6.1
Port Dover	2.7	4.8	2.3	4.0	5.3	4.7	5.2	5.5	5.1
Port Stanley	4.4	6.1	3.2	7:1	6.5	4.7	7.8	6.1	8.4
Saugeen	1.1	3.2	1.2	3.8	4.1	1.9	3.2	3.4	5· 3
Fort Garry	0.6	2.7	0.3	1.8	1.2	1.0	1.9	2.3	1.7

1874.

Table III, (Continued.) Means and Resultants for the year, for each of the three hours named in Tables I and II separately and for the three hours combined.

Clations		Baro	neter.	1	Temperature.					
Stations.	1	2	3	Year.	1	2	3	Year.		
Sydney	in. 29.956	in. 29 933	in. 29·944	în. 29 · 944	42.3	o 42·2	37.2	40.6		
Halifax	29.944	29 913	29 930	29 929	41.9	44.7	39.2	41.8		
Charlottetown	29.961	29.934		. 1	39·4	43.3				
Chatham		29.926			36.0	44.3	85.8	38.6		
Father Point										
Quebec	30.019	29.962	29.991	29.991	35.6	42.2	38.2	38.0		
Montreal						.]				
Ottawa	30.032	29 984	30.017	30.011	36.7	47.2	38.8	40.8		
Brockville	30.050	30.009			40.5	46.3				
Kingsten	30.079	30.039	30.062	30.060	40.2	46.7	41.2	42.8		
Toronto	30.054	30.012	30.039	30.035	42.4	49.0	42.1	44 . 5		
Port Dover	30.060	30.018	30.045	30.041	42.1	50.7	43.4	45.4		
Port Stanley	30.063	30.028	30.054	30.048	42.5	50.2	42.6	45.1		
Saugeen	30.052	30.027	30.035	30.038	40.5	45.2	39.4	41.7		
Fort Garry	30.021	29 976	30.002	30.000	26.4	40.7	31-1	32.8		
	F	lesultant	Direction	n.	Resultant Velocity.					
Sydney	874 W	S 72 W	8 61 W	S 69 W	3.0	2.2	2.6	3.6		
Halifax	N 77 W	8 66 W	8 88 W	8 85 W	1.8	2.0	1.4	1.7		
Charlottetown	874 W	872 W	8 59 W	S 69 W	2.9	1.7	2.1	2.2		
Chatham	N 87 W	S 88 W	8 85 W	8 89 W	2.6	2.5	1.8	2.3		
Father Point				.]						
Quebec	N6E	N 69 W	N 54 W	N 49 W	1.0	1.8	1.2	1.2		
Montreal		,								
Ottawa	N 63 W	8 82 W	N 76 W	N 81 W	2.4	3.1	2.0	2.4		
Brockville,				. 1						
Kingston	S 57 W	8 63 W	8 66 W	8 62 W	1.3	2.6	1.4	1.7		
-	N 44 W	N 83 W	N 56 W	N 63 W	2.7	3.3	2.8	2.8		
Poronto	14 44 AA				i i		0.0	2.6		
Port Dover	W	H 53 W	N 84 W	S 75 W	5.3	3.7	2.3	2 0		
		∺ 53 W	N 84 W	S 75 W	3.3	3.7	2.3			
Port Dover	W	553 W N 71 W	-		1.2	3.4	1.7	2·1		

Table IV.—Mean Temperatures of the several Months, and the Year, at Stations in the Dominion of Canada, from September, 1873, to December, 1874, inclusive.

							برحست					7		-	22.			200
			1873.									1874.						
	Beptember.	October.	November.	December.	Mean, 1873.	January.	February.	March.	April.	May.	June.	July.	August.	September,	October.	November.	December.	Mean, 1874.
Pembroke	0		8			9	9	22 · 4	9 3 0 2	63·0	64·9			62 · 4	45·8	° 3 1·3		
Little Current	54.8	42.5	23 4	27 · 2	39 2	16.7	13.1	20 5	29 ·0	49 0	59.4	66 4		1	i	İ	l	39.7
Fitzroy Harbor	57 1	44.8	23 · 3	21 · 0	41·8	17 · 7	14.0	25.1	33.6	55 2	66-2	70.7	66.6	62 · 9	46 3	30.2	11.2	41.7
Ottawa	55.5	43.7	2 2 ·4	21.8	40.9	10.8	9.5	24 ·5	30 · 2	58.6	67:3	71 · 4	68·9	61 · 7	48.0	25.1	11.4	40.6
Cornwall	57 · 7	48.2	23.6	24 5	42.3	17:0	15.7	25.3	33 · 7	53· 4	63.6	69 3	65·7	61 · 4	47.5	3 2·9	16.8	41.9
Brockville	56.0	49.0	25.5	2 3·5	41.7	22.0	10.2	29.0	34.0	53 ·5	63.5	68.0	64.5	60.5	46·5	27.0	14.0	41.0
Gravenhurst					1		١.	1		- 1	1				1		1	ł
Barrie	i	!		, ,	. !		j		. :					1			!	1
Peterborough	1	1 1		j	1		i .	. 1				i						1
Kincardine		1 1		Ì	. ,		i	. 1				i				1		
Belleville	58.7	47.0	25.9	28.7	43 ·9	21 · 0	20 · 4	27.3	34 · 1	53.9	63 ·6	68.1	67 · 7	62.7	47.1	34 · 4	22.5	43.6
N. Gwillimbury	58-4	48.3	28 · 4	30 ·6	43.6	23 ·8	21 0	27.6	33.4	54.2	65.2	70.2	67 · 7	64.8	48.9	36 0	24.8	44 '8
Point Clark	55.8	46.3	80.4	30.7	41 2	26 · 2	23.8	28.0	3 1·3	48.5	60.1	64.5	62 4	62 · 7	48.7	36 · 9	27:0	43 ·3
i		46.4	- 1	- 1	- 1			1		- 1		1	- 1	1	į	Į		
Brampton	56.7	43 4	26 · 3	27 · 1	41 · 9	23 · 2	19.6	27 · 4	32.2	54.9	64 · 2	68·2	66.5	62 · 2	45 · 8	33 · 1	24 · 4	43.2
Toronto	57·3	45.7	27 · 6	29.8	42.9	24 ·8	22.8	28.7	34 · 2	52.5	62.5	67.9	67.1	63 · 3	47 5	34.6	25 · 7	44 · 3
Stratford	55 · 9	43 9	26 7	28 · 4	42.1	23.6	22.0	27 · 1	32.3	58 5	63 · 2	66.6	65 · 6	61 6	45.8	34 1	23 · 9	43.3
Granton	54.8	43.1	27·2	28 1	. /:	24 · 1	22 · 3	29 · 0 _[33.0	54 · 6	64 · 2	67.4	65 6	61 · 7	45 7	34 · 0	24 4	43.8
Dundas	57 · 2	44 · 3	27·9	29 · 2	.	26 · 9	22 · 4 !		.	.		. 1		
Hamilton	61 · 2	48 0	30·7	33 · 3	45 6	28.7	25.8	32.6	36 2	55.8	64 · 9	75 - 7	70.6	66 · 4	50 · 8	38.6	26 4	47.7
Woodstock	55 · 4	43.8	27 · 3	27.8	41.7	24 4	22·0	30.0	33.0	54.6	64 · 3	67 · 3	65 9	62 · 4	46 4	31 · 7	24 9	44:2
Ingersoll	55·5	44 2	27 . 9	28.7	12.4	25 4	23 · 1	31 · 4	33 · 4	54 5	64 9	67.7	66 1	61 · 9	45·3	34 · 4	26 · 2	44.5
Simcoe	65 · 1	52 ·6,	32.5	34 . 7	17 · 8	25 6	29 · 2	30·6	35 8	58.0	68.6	73.6	67 . 4	63 3	48 8	36 8	27 · 9	47 · 1
		47.9		,	í.			i	i		- 1			- 1	- 1			
Windsor	62 · 3	48.0	31.3	32.2	16 9	27 · 7	26 · 4	33 g :	37·9 [‡] [59·3	59·1	72 · o[1	i 70÷6∫6	3 6 : 7]	50 · 8	37-9	27·7	48.4
Quebec.			į	ļ		į	Ì			1	İ	į	Ì					
Quebec, Observ'y.	54 9	42 8	20.0	ا 16:1]	39.6	12:1	11.5	21 · 7	30- 8 .4	17.9	55 - 9	3 7 : 5] 6)4·6	30.2	12.5	29 · 3	 11:6	38.0
Quebec Citadel	.	.	. /1	5.6	. 1	14.6	11.6	20 · 6 2	29.5	 6+2 _]	57 - 9	35·5 [[] (3 1	57:5	14 7	27 2	11.2	37 · 5
Huntingdon	56.9	46.3	33.6	2.5	ı	- 1	į.		1		1	- 1	ì	1		- 1	1	
							;						1					

TABLE IV .- Mean Temperatures of the several months, and the year, &c., Continued.

			1873.				~					1874.						
	September.	October.	November.	December .	Year, 1873.	January.	February.	March.	April.	May.	June.	July.	August	September.	October.	November.	December.	Year, 1874.
Nova Scotia.					 													
Digby		49.2	31 9	27 4	42.6	28.1	22 2	30·9	33.6	49.0	55.6	62·2	61.9	1 - 1	49.8	37 · 0	26 · 4	42.9
Wolfville	55.8	48-2	32 2	26-4		25.7												
Halifax	5 6 ·8	49 · 4	33 . 3	24 4	42.2	27 · 2	19.9	30.8	33.4	49 2	53.7	62 · 4	61 · 3	57.4	48.7	36 ·8	26 · 2	42.2
Glace Bay	56.5	49.3	35 8	25 . 8		26.0	: 18·5	28.8	29 3	44.1	46.5	59 9	60 4	54 4	48.8	3 6·7	25.3	39.6
Sydney	54.8	47 4	34 - 9	25 6);	25 2	17.3	27 · 9	30.6	45.0	49.5	61.5	60.7	54.7	49 . 7	37 · 2	28.0	40.6
Windsor	57 · 2	48 7	31 . 8	24 . 2		27 · 3	19.8	31 · 3	32.2	50.6	53.0	65 7	63.9	58.2	49.1	36.7	24.8	42.7
" King's Coll.	ı	į	ĺ	i i		1	1	}	}	1	i i	ì	١.	1				
Guysborough	57 . 5	49	32.	21.6	40.8	23.9	15.6	27 · 2	30.6	46.2	50.7	63 · 2	62.8	57 0	49 7	35 2	24.3	40 €
Truro	ŏ 4 · 6	47 - 4	30.4	21 4	40 · 1	25 · 2	16.3	28.7	32.2	48.5	54 5	62.2	61.3	58.0	47 1	34 4	22 · 2	40.1
New Brunewick.				:				}					İ	Ì				
St. John	53 · 6	47.8	28-1	22 ·	39 2	23 · 1	18.6	29.0	32.6	46.2	53.8	59.5	60.9	57 2	48.8	35 6	21.4	40.1
Bass River	52 ·8	44 . 2	24 :	3 16 6	37 - 7	19.2	12.3	27:0	31.0	48.3	53.0	65.8	59:3	5516	48-1	32 5	17.0	39·1
Fredericton	55.1	46 2	25	17.8	40.4	18.4	15.8	27.9	33 · 4	50.6	57.0	65.6	61 1	57 · 1	46.5	32.0	15.6	40.
Bathurst	53 · 5	43.2	25.8	3 16 - 8	38.8	15.0	13.7	25 5	81.4	46.2	53 1	64.1	61 3	55 4	46.9	31 1	12.3	38 (
Dalhousie	į.	į.	i	1	1	{	1	1	1	1	1	1	i	i	1	i	ì	[
P. E. Island.		-		1			İ	}					İ					1
Charlottetown	57.0	49.0	31 :	3 21 4	40 3	22.8	15.5	27 · 7	31 . 2	48.0	52 8	64 1	63 . 3	58.6	50-6	36 2	21 4	40
George Town	1			1	٠.	1)	i .	ì	İ	1	1	61.8	1	l	į.	ļ	
Newfoundland.																	1	
8t. John	55.5	48.7	39.4	26 2	41.6	28.3	20.6	28.6	30.7	42.0	17:4	59.8	9:60:8	54 . 8	49 7	37.6	3 31 · 6	41.
Harbor Grace	53.7	48.1	38.7	25.8	41.5	27.8	21.4	29.0	31.8	42.7	47.9	60-1	5- 60 - 8	54 . 8	50 1	37.2	31 · 1	41*
Fogo	55.3	47.6	,	27 () .	23 .	15.0	26.0	28.1	40.4	47 - 8	60.6	61 · 6	36.8	52.8	38-1	130.0	40.
Channel	ļ -		40 ());31 · !	5	30 9	20.8	31 (32 4	43.7	49 2	58 4	F58 6	53 3		36 6	129 6	3 .
Bay St. George	١.	1				25 4	16.4	27 7	29 :	42 1	51 7	67.0	70 8	64 (58.5	41.4	31 .7	43.
Manitoba.	ļ	1			1			!					i					
Fort Garry	45.6	35 3	ः १३ १ -४	8 6 6	32:	3-5-8	1.8	9.1	26-1	52.9	63	H66-0	: 5 64 · 4	155.3	42.4	13.8	4.1	32
Winnipeg	46 1	35:0	[15-0	1 4	(31 ·	} }-8∵	9.6	: 5 8 1(27 (53.4).63 ·	s 67~	¥'65•1	58-6	39.0	14.0	3.8	30
British Columbia.	ĺ				-		j			ì	į	į	1	1				
Spence's Bridge	61 .7	{ [48 ·4	1 1:37	4 20 0	48	18.0	27.	31.6	 52 · (59.	5 62	69 .	67 - 6	3 59·S	50 :	23 ·	32.0	 46*:
Esquimault	ì	1	1	1		1	39-1	1	1	1	1	1	1	1	1	1	1	1

Table V.—Highest Temperature in each month at several Stations in the Dominion of Canada, from September 1873, to December 1874, inclusive.

		18	73.							18	74.					
	September.	October.	November.	December.	January.	February.	March.	April,	Мау.	June.	July,	August.	September.	October.	November.	December.
Ontario.	88.0	77:0	0 50·0	55:0	62:0	<i>°</i>	59.0	60.0	93.0	90.0	94·0	92·1	91.0	72·1	64·1	48
embroke						!!!	53 9		1 :		1				60.3	1
Attle Current	1	ł	57.5	51.5	51.6			- 1				79.6	83.6	65.1	64 · 6	43
itzroy Harbor	1	i	1	i	1		1		1	l .			1	!	Į.	1
)ttawa	1	•	ļ	i	ł	1			i .	1	i		1	1	i	1
Jornwall.	1	ł	1	;	1	1				l .	į)	ļ	1	1
Brockville	ŧ.	ł	1	1	ì	i	ŧ	i	!	1	!	j	1	i .	ī	Į
Fravenhurst		}	1	ş.	1	1	1	1		i	1	1	1	{	1	i
Barrie	i	•		ļ	,	í	1	1	I	1	Ç	1		i	ł .	1
Peterborough	1		1	1	1	1	•		ı			1			1	1
Kincardine	86.3	73.0	49 .	58.9	60.5	46.2	56.5	59.8	86.5	92 · 5	92.5	88.7	87 €	69 8	65.	47
Belleville	80.0	66 . 7	48∙€	55.7	47.3	40.5	53.8	56.5	79.9	86 · 1	86 · 1	92.2	88 2	63 7	57 . 7	44
North Gwillimbury	88 0	73.0	55 8	52.5	60.5	42.0	61 · 5	56.0	92.0	86.5	90.0	92 - 5	91 .	73.0	66 (44
Point Clark	78.0	65.0	48.0	51.0	48.0	44.0	49.0	49 0	74.0	80.0	85.0	85 0	81 (62 0	56.0	40
Goderich	83.8	71.2	49-1	55 9	58-1	44 · 3	57 9	5 5 · 2	87 4	89 - 2	90.6	90.0	89 · 1	67 : 4	63.6	48
Brampton	74.0	55 (43 (47.0	53.0	42.0	51.0	50.0	76.0	94.0	95.0	94 · 0	82.0	64 (56.0	12
Foronto	79.0	69-2	51 .	48.2	57 - 5	42.0	57.0	60.8	86.0	88.0	83 - 8	95.0	j88·6	67 (61 (0 44
Stratford	79.0	66 7	47 (53.4	55.8	42.0	50.7	60 · 2	83.5	87 • 0	87 - 8	87 - 8	85 1	68 :	3 59 3	3 41
Granton	84.0	72.0	50.0	53.0	58.0	42 (53 0	59 0	88.0	91 .	95.0	90.0	93 (75	62	0 45
Dundas	. 76 (0 60 - 1	47.0	49 (54 (45	3							1.	.	ĺ
Hamilton	. 86 (6 74	56	3 54 (5 60 8	3 48 8	57 - 3	58 8	91 . 2	91 .	91 - 8	99:	93.	77	3 61 .	8 51
Woodstock	. 83 ·	70.	52	o 60 ∵	64 (47 (57 1	66 4	87 - 2	90.4	93 2	96 2	93 :	72 :	2 63 :	2 48
Ingersoll	81	5 71	5 48·	5 56 :	61.	45.5	56 5	66.6	5 89.5	91.	94 (92 (94	71.	5 62	5 47
Simooe	. 84	6 79 1	3 57	8 54 1	8 61 (43.(60.0	6 5 (93.0	92	94.8	96 : 1	87	72.	8 64	8 50
Welland	. 84	0 70 .	53.	0 53 0	62.	47.0	57 • 0	63 (87 (90.0	90.0	95 (90	71.	0 67 1	0 50
Windsor	88	8 79 :	1 57	5 57 :	1 57 :	150.0	61 .8	72 2	94 - 7	92.8	99 - 8	95 1	94	5 77 .	3 67	4 51
Quebec.	1										!					
Quebec, Observatory	. 81	0 65	0 44	0 48	0 52	36.0	49.0	53 (81 .	81 .	88 () .	80	0 62	0 51 ·	0 36
Citadel	. .			32	2 55 .	5 41.4	49.0	53.0	80.0	83.6	87 :	83.	0 81	0 64	0 51 ·	0 37
Huntingdon	. 87	0 73	0 53	0 60	0 63 0	48.	56.0	57.0	87.0	ol90 ·	91.0	90	083	0 70	0 63	0 48

TABLE V.—Highest Temperatures in each Month, &c.—Continued.

		187	73.				.			18	74.					
	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Nova Scotia.	٠	٠	•	•				۰					•	۰		
Digb y																
Wolfville				;		ì	1	ì	ŧ.	: :			!		ĺ	
				53.9		1	,	•	1	1)	1 1		i 1		•	1
Glace Bay			!	(1	1	3							
Sydney	, ,					,	1		1						ı	1
Windsor						i .	}	•	1	1		i		70·0	60.0	48
Windsor, King's College	1			1		1	,		1							.
G.1.7 2 2 2 1 2 1 2 1	! :	[49.0		ţ		}	1	1) :		}	,
Truro	73.0	70.0	57 · 2	54.3	54·3	43.5	52.8	54.1	71.4	76.5	8 2·3	80.3	76.0	66.7	58 9	46
New Brumswick.	}			1												
St. John																
Dunn zu.v.	ı	Į.	ł	55.1	1	1	3	l	ŧ				1		i	ĭ
Fredericton																
Bathurst																
Dalhousie	72.5	55.5			56:0	45.0	42.5	44.3		76.5		84.0	7 7 ·5	64.5	55.5	30.
Prince Edward Island.				1									}			
Charlottetown	71 · 0	67 4	53.4	49.4	20.0	45 4	51 · 8	49.0	74.6	75.0	87 · 7	84 · 0	76.6	69.8	54.6	43
Georgetown						47.0	51 0	5 3 ·0	75.0	75.0	88.0	81.0	76.0	67.0	58.0	46
Newfoundland.	}			1												
St. John's																
Harbor Grace																
Fogo	76.0	68.0														
Bay St. George		1 .				ĺ	ì,		i i	75.0			t .		ĺ	1
Channel			54.0	46 0	45.0	44 0	47.0	48 0	57 0	61.0	71 · 0	68 · 0	64 0		62.0	4 3.
Manitoba.																
Fort Garry	1	1	1	30 3	ì	i	1	į.			;				{	1
Winnipeg	71 6	71 . 2	39 · 2	30.1	27 · 0	30.3	42.3	75.0	94 ·8	94.8	95.5	88 · 1	88.7	71.3	53.8	32
British Columbia.			İ						! !							
Spence's Bridge	88.0	79.0	59 · 0	45.0	48.0	48.0	62 0	82.0	88 · 0	8 2 ·0	93 ·0	90 ·0	84 · 0	78.0	\$1.0	47
Esquimault	61.0	64.0	52:0	· .	i .	1	1		76.0	78.0	77.6	72.6	71.9	70.1	69.0	51.

Table VI.—Lowest Temperature in each Month at several Stations in the Dominion of Canada, from September, 1873, to December, 1874, inclusive.

			-	Ť						 -	==	-	-			
		18	73.							18	74.					
	September.	October.	November.	December.	January.	February.	March.	April	Мау.	June,	July.	August.	September.	October.	November.	December.
Stayner	ر 29·0	16.0	7.0	7.0	-9.0	-10.0	-17.0	• •4·0	23·0	33.0	 41·0	° 42·0	9 38·2	25.0	4.1	-7·0
Pembroke								1		39·3				25 · 2	- 1	
Little Current	32.5	22 · 0	-1.2	1.8	-2 2·9	-16.3	-3 ·3	33.8	28 · 1	3 5·8	48.7	41 · 2	39.3	24 · 1	-6.4	-20.5
Fitzroy Harbor	35 · 7	20.0	-11.0	-14 0	-2 8·0	-36.0	-2.7	7.0	29.0	48.5	59.0	50.0	40.0	26.0	-13·0	-32 ·0
Ottawa	3 2 ·9	17.0	-2.2	-14 · 2	-20 · 9	-22.8	-2.7	0.2	25 · 4	43.8	48.8	45.2	34 · 5	29.2	-7.7	-20.9
Cornwall	29:0	21:0	-6.0	-22 3	-2 6·8	- 32 · 8	-5 ′0	1.0	21 · 9	39 · 5	46 4	34 · 2	33 · 2	25.2	-20.4	-22 ·5
Breckville	3 2 ·0	25.0	-1.0	-11 0	18.0	-25.0	1.0	7.0	25.0	42.0	47.0	40.0	36.0	26 0	-6.0	-21·0
Gravenhurst	32 ·3	23 · 3	1.8	0.8	-21 ·7	-16 7	-0· 7	13.0	29 · 3	44 2	49.0	49.3	39.8	24.8	0.9	-33 · 4
Barrie	30•5	18 8	-4.2	-1.4	-22.8	-16.8	-2.4	-1.4	24 · 0	45.0	43.2	41.0	33 · 2	28.5	6.0	-14·8
Peterborough	29.0	19.0	-5 ·5	-5.5	- 21 ·3	-21 · 2	-0.3	2.1	23.3	35 · 6	44.4	40.3	35 · 3	21.5	-10·4	-21 · 2
Kincardine	35 2	26.5	11.2	17.3	0.2	4.2	10.0	9.5	25.0	35.0	40.9	44.4	38.8	28.7	12.0	8.0
Belleville	34.0	22.0	-1.0	-1.0	-16.5	-13-8	3.0	6.1	26.3	43.0	51.6	46 3	40.1	28 8	0.2	-17 · 5
N. Gwillimbury	41.2	30.0	12.0	7.5	-11.2	-14 · 0	4.0	7.5	32.0	53.5	54.0	56.0	46.0	34.3	4.0	-10 0
Point Clark	36.0	28.0	17.0	19.0	1.0	7.0	12.0	12.0	35.0	44 (46.0	49.6	42.0	28.0	20.0	8.0
Goderich	31.2	24 5	14.0	17·1	0.7	3.3	9.4	10.2	25.2	38.7	46.8	43 7	41.6	30.7	17:3	3.3
Brampton	38.0	29.0	6.0	10.0	1.0	-1.0	6.0	13.0	32.0	49.0	52.0	54.0	42.0	33.0	5.0	2.0
Toronto	33.2	24 · 2	0.8	6.4	-4.0	0.4	5.2	9.5	25 8	44 . 2	44 · 4	48.0	39 - 8	34.8	8.2	-7:5
Stratford	30.1	23.8	1.0	8.6	0.1	-2.8	7.8	7.4	23 1	38.8	44.0	41.(39.1	L 2 3 · 8	3.2	-1.5
Granton	35.0	18.0	6.6	13.5	-1.3	0.7	8.0	11.0	32.0	45.0	52.0	50.0	39.6	23 0	9.0	4.(
Dundas	41.5	26.0	10.6	16.4	4.0	4.8		.	-							
Hamilton	33.1	28.0	6.7	11.3	4.5	2.2	9.8	12.0	32.0	42.8	48.6	48.	41	32.1	9.8	-8.0
Woodstock	2 8·0	22.9	-3.0	7, 5	-2.0	-3.0	7.2	7.0	22.0	37.8	40.7	41 1	ા 34 ∙ ક	5 22 2	-1.5	-11 6
Ingersoil	31.5	24.0	4.0	5.8	2.7	2.7	8.8	11.0	30.4	138.4	45.	42.0	38	5 24 · 0	2.7	-2.0
Simcoe	30.0	22.0	2.0	10.0	-3.2	-5.0	10.0	7.0	25 .	36.0	43.0	38.8	28	14.6	2.5	-7:5
Welland	3 5·0	25 · 0	4.0	13.0	2.0	-4.0	8.0	10.0	22 .	7 40 .0	47•(45 (3 8·0	25.0	6.0	2.0
Windsor	37 · 0	23.2	2.7	11.0	-3.2	5.8	13.0	9.0	28.	44.	48.6	50.7	38	20.8	-0.4	1.5
Quebec.								1					i			
Quebec Observatory.	3 3·0	23 · 0	-3.0	-15.0	-25 0	-22:0	-9.0	-1 (24.0	38.0	52 .) .	38	0 29 0	4.0	-20.0
Quebec Citadel					-30.0	-21.0	-9.0	6.6	3 23.	37	50.1	42.0	37.	0 29 - 5	1.2	-18 (
Huntingdon	32.5	26 0	-5.0	-2 0·0	-19·0	-29.0	-2.0	5.0	25	43.0	51.0	40.	36	0 29 0	-5.0	-23 (

TABLE VI.-Lowest Temperature in each Month, &c.-Continued.

			70 W 68		in por	toure							o crea			=
		18	373.							187	4.					
	September.	October.	November.	Decembor.	January.	February.	March.	April,	Мву.	June.	July.	August.	September.	October.	November.	December.
Nova Scotia.	·	o	o	0	Q	0	٥	9	0	٥	•	0	°	0	۰	Q
Digby	42.0	30.0	10.0	4.0	-10.0	-4.0	4.0	10.0	34.0	42 ·0	52.0	50.0	44.0	30.0	18.0	0.0
Wolfville	45.0	34.9	16.5	0.5	-16.0	-8.6	8.2	12.8	35.8		 •		48.0	34 · 2	13.8	-5·0
Halifax	38.2	29.8	8.8	-2.8	-15·8	-11 · 5	-9.0	7.2	30.0	36 5	43.3	43.6	40.0	27 · 3	12.3	-4.0
Glace Bay	38.0	30.0	8.0	6.0	-12:0	- 10 ·0	-11 0	8.0	19.0	23.0	38.0	43.0	33.0	28.0	16.0	-5.0
Sydney	33.0	26 · 2	11.0	5.2	-11.0	-12:5	- 2 3·0	8.0	22.0	27 · 2	41.8	39.0	31.8	27 · 2	19,6	-1·0
Windsor,	34.5	3 0·0	8.2	-6.0	-15:0	-13·0	-11:0	4.5	27 · 0	36 0	44.0	42.0	36.0	24 · 0	13.0	0.4
Windsor, King's Col.	33.5	27 · 0	8.0	-2.0	-14·0	-10.0	-10 0	6.2	27.5	3 6·0	47 · 0					
Guysborough	40.0	31.0	11.0	-2.0	-19 0	12.0	-18:0	6.0	26.0	2 8·0	46.0	47.0	39.0	30.0	14.0	-12.0
Truro	31 · 4	26.0	3.0	-20 · 0	-20 ·5	- 21 ·0	-21 · 0	5.0	25 0	3 0·5	46.0	42 3	34 · 0	21 · 6	11.0	-10 ·0
New Brunswick.																
St. John	37 · 0	30.0	1′0	-9.0	-20.0	-ì5·0	-3.0	1.0	29.0	3 8·0	48.0	47.0	41 · 0	30.0	6.0	-12 0
Bass River	30.0	22.0	-4 ·0	-20·1	-25.5	-25.5	-21·8	-1.2	22 2	3 3·8	47.8	38 · 2	32.5	25.0	-1.8	-1 5·2
Fredericton	32.0	26.0	-1.0	-21 · 0	-30 ·0	~24 · 0	-11.0	-1.0	26 · 2	34 · 4	47 0	40.6	36 · 3	22 · 1	-7·8	-14-2
Bathurst	35.0	22.0	9 ·0	-13·0	-2 8·0	-26.0	-19·0	0.0	24 ·0	3 3·0	44.0	3 9 0	34 · 0	24.0	8.0	-11 ·0
Dalhousie	39.5	29.5			-23.0	-15.0	-2.0	5.0		39 ·5		47.0	41 · 5	3 3·0	13.0	-13·0
P. E. Island.																
Charlottetown	3 6·8	31 · 2	1 3	-1.7	-17:9	-16.5	-7:0	7.5	29 ·2	36·3	47 7	46.7	42 · 1	33 · 2	15.3	-12·3
George Fown						-10.0	-16.0	8.0	28 · 0	35.0	46.0	44.0	39.0	31 · 0	15.0	-12.0
Newfoundland.																
St. John's	40.5	29 · 0	2 2 2	8.5	2.5	-7 5	-14.0	5.0	26 · 0	2 8·0	33.0	42.0	34.0	31 0	19.0	3.2
Harbor Grace	36 · 0	31 5	15.0	6.0	5.0	6.5	-8 0	9.0	28.0	32.5	3 6·5	43.5	38.0	32 5	20.5	4.0
Fogo	40.0	32 · 0		10.0	-3.0	-10.0	-10.0	10.0	28 · 0	30 · 0	35 0	46.0	40 · 0	37 · 0	20.0	10.0
Bay St. George		.			-3.0	-15 0	-11 0	-1 '0	29 0	32 0	50·0	54.0	43 · 0	40 0	30.0	10.0
Channel			9.0	19.0	9.0	-3.0	-0.4	13.0	36 · 0	41 · 0	50.0	50.0	44 · 0		22.0	4.0
Manitoba.																
Fort Garry	20.0	-1.0	-25.5	-26·3	-38.7	- 3 2·5	-26.0	-7.0	26 · 2	30.5	46 0	41 · 0	28.5	6.0	31 · 0	_34·3
Winnipeg	22 ·0	-3.0	-26 · 8	-3 2 ·8	-43 · 5	- 3 0·2	-24 ·3	5 · 6	2 8·6	39.5	42 5	43 2	27.8	13· 2	-32 ·8	-37 · 7
British Columbia.																
Spence's Bridge	3 1 ·0	27.0	6.0	-3.0	~2.0	1.0	-20.0	30.0	40.0	44 · 0	50.0	48 · 0	41 · 0	26 · 0	-4.0	15.0
Esquimault	36.0	31.0	23.0	18.0	13·5	21.9	2 8·3	34.3	41.0	43.0	48 1	49 1	42.1	34 0	28.0	27.9
						954								!		

Table VII.—Mean Temperature in each Quarter and in the Year, from September 1873, to December 1874, with the Highest and Lowest Temperatures in the year 1874, and the dates of their occurrence.

	1		,					77.)			
	18	73.			1 874.			High	est Temperature, 1874.	\$40W6	st Temperature, 1874.
	Autumn.	Year,	Winter.	Spring.	Summer.	Autumn.	Year.	Temp'ture,	Time of Occurrence.	Temp'ture.	Time of Occurrence,
Ontario. Stayner	° .	o	°.			° .	0	94.0	8th July	-17·0	17th March.
Pembroke	; ·			49.4							
Little Current	31.0	39 · 2	16.8	45.8	64 · 2	32.0	39.7	86.1	22nd J une	22 ·9	30th January.
Fitzroy Harbor	29.7	41 8	18.8	51.7	66 7	36.0	41.7	98.7	12th August	-36 ·0	2nd February.
Ottawa	29.3	40.9	14.8	52.0	67 · 3	28.2	40·6	94 · 0	19th July	22 ·3	2nd ,,
Cornwall	31.4	42.3	19.3	50.2	65.5	32·4	41 · 9	91.3	12th August	-32 ·8	2nd ,,
Brockville	32.7	41 · 7	20.5	50.3	64.3	29 · 2	41.1	89.0	{ 25th July } { 12th August }	—25 ·0.	lst "
Gravenhurst	30.9	40.0	19.6	49 1	64 · 4	31.3	41.1	90.0	1	33 · 4	31st December.
Barrie	33.2	42.9	22 · 2	49 • 2	65.9	35.8	43.3	91.8	7th July	-22 ·9	30th January.
Peterborough	31.8	42 · 9	20.9	51·2	67:0	33.5	43.1	97 · 1	12th August	· - 21·3	30th ,,
Kincardine	35.5	40.9	18.6	51.5	67 · 7	33.8	42.9	92.5	{22nd June}	0.5	30 th ,,
Belleville	33.8	43.9	2 2 ·9	50.5	66·2	34 . 7	43.6	92.2	12th August	-17·5	31st December.
North Gwillimbury	3 5·8	43.6	23·1	50.9	67.6	36.6	44.8	92.5	17th ,,	14.0	lst February.
Point Clark	35.8	41 · 2	26 ·0	46.6	63 · 2	37.5	43.3	85.0	{24th July} {11th August}	1.0	30th January.
Goderich	35 6	43.7	26:2	50.8	6 6 · 6	37 · 7	45.3	90.6	14th July		31st
Brampton	32 · 3	41.9	23 · 4	50 · 4	65.6	34 4	43.5	95 0	14th ,,	—1 ·0	5th February.
Toronto	34 · 4	42.9	25 · 4	49.7	66.1	35.9	44.8	95.0	 12th August		15th December
Stratford	33.0	42.1	23 · 2	49.7	64.6	34.6	43.3	87.5	{7th July} {12th August}	2 ·8	8th February.
Granton	32.8		25·1	50.6	64.9	34.7	43.8	95.0	7th July		31st January.
Dundas	33.8										, and the second
Hamilton	37 · 3	45.6	29.0	5 2 ·3	70.2	38 6	47.7	99.3	12th August	-2 6	15th December.
Woodstock	33.0	41.7	25.5	50.6	65 · 2	35.3	44-2	96 · 2	12th ,,	11 `5	14th ,,
Ingersoll	33.6	42·4	26.6	50.9	65 · 2	3 5 3	44.5	94.5	{7th July}	~2 ·0	
Simcoe	39.9	47 - 8	28.5	54 · 1	68:1	37 · 8	47.1	96.1	12th August	7 ·5	lõth .
Welland		1				38-2			12th ,,	-4.0	8th February.
Windsor	37 · 2	46 · 9	29·3	55 · 6	69·8	38.8	48 • 4	99.8	7th July		18th January.
Quebec. Quebec Observatory	26.3	39 · 6	15.1	44 9	64 · 1	27.8	38.0	88-0	 27th July	25°0	28th Japuary.
Quebec Citadel		i				27.7	- [26th ,,	30.0	
Huntingdon	30.8		4			31.2			25th ,,		2nd February.

TABLE VII.—Mean Temperature in each Quarter and in the Year, &c.—Continued.

						===					
	18	73.		_	1874.			High	Tomperature, 1874.	Lowe	Temperature, 1874.
	Autumn.	Year.	Winter.	Spring.	Summer.	Autumn.	Year,	Temp'ture.	Time of Occurrence.	Temp'ture.	Time of Occurrence,
Nova Scotia.	٥	^	0	0	9	0	9	0		•	
Digby	36 · 2	42.6	27.1	46·1	6 0·6	37 • 7	42.9	79.0	{ 11th July } { 13th August }	1 0·0	26th January.
Wolfville	35.6							84.0	26th July,	,	26th ,,
Halifax	36.0	42.2	26.0	45.4	60 · 4	37 · 2	42.2	89.0	19th ,,,	15.8	27th ,,
Glace Bay	37 · 0		24 · 4	40 · Q	58 2	36.9	39.9	86.0	16th ,	-12.0	26th ,,
Sydney	35.8		23.5	41 · 7	59 · 0	38.3	40.6	82.8	12th August	-23.0	lst March.
Windsor	34.9		26 · 1	45 3	62 6	36-9	42.7	"90·Q	16th July	15.0	26th January.
Windsor, King's Coll	35.1	·	25-9	47 · 0	•			94.0	17th	14.0	27th ,,
Guysborough	34.2		22 · 2	42.5	61.0	36 4	40.5	83.0	ſ	19.0	h ''
Truro	33.5	40.1	23.4	45.1	59.8	34.6	41.6	82.3	15th "	21.0	{ 8th February. { 1st March.
New Brunswick.										}	
St. John	i .	į i	•			,			,	ŀ	
Bass River	28.4	37.7	19.5	44.1	6 0·2	32 5	39-1	8 6 .6	16th July	-25.5	{ 31st January. } 2nd February.
Fredericton	29.8	40.4	20.7	47 0	61.3	31 4	40-1	86.2	15th	30.0	31st January.
Bathurat	28.5	38.8	18-1	43 6	6 0·3	30 · 1	38 0	86.0	12th August	-28 ·0	31st
Dalhousie			13.3			28-5		84.0	12th	3 3·0	31st ,,
P. E. Island.) .				ŀ	
Charlottetown	33.9	40.3	22:0	44.0	62 ·0	35.7	40-9	87 7	lock July	-17 ·9	26th January,
George Town		-		49-2	60.6	35.6	•	86.0	16th		Ĺ
Newfoundland.				ĺ	f F		,		Í	}	
St. John's	38-1	41.6	25.8	40.0	3 8·5	39 •6	41 0	83.0	39th July	_14 ·0	lst March.
Harbour Grace	37.5	ŀ	2	t ·	ľ	Ĕ	2			ř .	***
Fogo	-		21.5	38.8	#9 :5	40.3	40.0	87.0	26th	-10.0	7th February.
Bay St. George			28.2	41.1	67.3	43.9	43.8	89.0	30th August	15.0	28th February.
Channel			21.6	41.8	56 ·8		•	71.0	20th July	-3.0	28th ,,
Manitoba.	<u> </u>]			!)		4			
Fort Garry	18.2	32 · 3	l	ſ	t .	ř	f	94.5	ľ ·	-38.7	25th January,
Winnipag	17.1	31.8	0.9	48-4	6 3·0	18-8	32.8	95.5	21st July	-43.5	25th
Eritish Columbia.				}			}		1		
Spence's Bridge	35.3	48.1	1	1	L	1	•	93.0	26th July	-20.0	22nd January.
Esquimoult	47.8	<u>† </u>	38.5	53-5	56 ·8	<u> </u>	48:7	78.0	15th June	13.5	22nd ,,

TABLE VIII.—SEPTEMBER, 1873. Daily Mean Temperature at certain Stations in the Dominion of Canada.

и	ominic	on or	Canad	3.										
	Spence's Bridge.	Winnipeg.	Little Current.	Gravenhurst	Woodstock.	Fitzroy Barbor,	Huntingdon.	НаЖах.	Sydney.	Truro,	Charlotte- town.	St. John.	Fredericton.	Harbor Grace.
1	68·2	o 56·4	60.0	61.1	67.2	63.1	63.5	59·8	54.2	59.2	59·8	60.3	o 57·4	56·5
2	69.2	56.8	62.4	60.4	60.0	62.1	60.3	62.8	63.5	60.1	62.0	58.0	58.7	58.6
3	66.8	58.2	62.5	64.9	60.1	62.4	57.0	55.7	55.0	53.2	53.9	57.3	55.4	55.3
4	68.2	47.3	65.2	66.0	68.7	6 6·6	65.2	57.8	58.4	56.4	58:3	55.7	56.8	52.0
5	68.8	46.4	51 ·8	54.8	61.7	61.2	62.0	64.3	64.1	66.5	65.0	56· 3	65.0	55*5
6	70.5	46.1	44.5	46.5	53 ·5	49.7	51.0	61.2	60.1	56.4	67.7	58.0	55.8	60.8
7	73.0	49.8	53.8	48.4	50 ·8	53.7	53.8	56.4	51·1	67 · 2	53.6	51.7	54.7	53.2
8	70.5	56.8	53.0	50.2	52.2	55.4	55.0	54.1	54.2	52.9	54.2	52.0	53.3	53.4
9	67.5	60.4	59.0	51.2	53.2	58.6	<i>5</i> 8·0	52.6	52.9	49.0	56.8	51.3	53.4	6 3·6
10	65.5	57.1	61.2	57.7	58.5	61.4	59.5	53.6	53.2	50.4	58∙1	53.0	53.2	52.9
11	64.8	44.3	72.9	66.0	62 ·8	62.1	62.5	28.8	52.2	59 ·6	61.0	55.3	54.8	54'1
12	65.5	39.0	59.8	70.4	71.7	73.2	69.2	61.0	60.8	58.6	63.3	51.0	61.2	58.8
13	71.5	42.6	40.6	44.5	50.8	51.4	57.5	58.6	60.4	62.7	63.3	55.3	61.4	58.8
14	67.8	51.4	42.8	41.7	41.3	45.0	48.3	63.6	64.3	60.2	55.2	51.7	49.6	65.4
15	66.8	38.0	52.0	46.8	46.2	47.5	49.7	52.7	52 ·8	46.8	49.0	49.7	48.7	61.9
16	54.0	47.2	47.0	43.2	47.1	50.7	51.2	20.8	49.5	48.7	53.3	52.0	49.1	49.0
17	55.0	39.0	52.8	46.1	48.0	46.9	45.0	5 1.5	53.2	47.8	50.0	49.0	46.3	54.0
18	56.2	41.0	51.5	61.1	67.2	65.6	59.8	52.7	46.4	45.1	54.7	48.7	51.1	50.3
19	57.5	39.4		44.1	53.0	55.1	58.0	56.5	55.2	55.3	59.7	55.7	58.5	48.4
20	58.0	44.7		39.8	43.0	48.0	47.0	59.7	58.8	57.3	56.6	54.7	50.4	57.3
21	60.2	46.4	·	45.5	45.7	48.1	46.2	49.4	50.6	47.5	50.9	48.7	46.4	53.8
22	59.5	47.2	52.1	50.1	1 46.7	53.0	54.0	50.1	43.5	47.6	52.8	48.7	45.1	42.1
2 3	57.2	48.4	48.6	48.9	51.7	54.0	55.0	54.6	46.5	52.6	53.6	52.0	49.2	45.1
24	56.0	44.0	54.4	51.2	53.5	53.2	51.0	57.8	53.1	58.3	56.4	55.0	53.8	50.7
25	51.8	45.0	54.0	55.6	57.1		54.8	55.5	53.0	52.3	50.4	52.3	50.8	47.0
26	48.5	38.3	62.6	54.9	56.7	60.3	56.2	54.1	51.6	53.4	65.0	52.0	55.5	50.8
27	47.8	38.0	59.3	65.5	72.4	72.5	74.3	56.1	55.4	55.7	56.2	51.7	54.6	52.5
28	51.0		61.1	68.8	ì	71.8	1	66.2	55.8	59.5	59.0	60.8	63.8	57.7
29	57.5	1	49.9	53.1	57.8	59.8	63.8	61.4	59.3	62.9	65.2	56.0	68.7	51 · 2:
30	57.0	32.7	43.8	42.9	44.3	44.8	44.5	54.8	53.9	50.1	48.4	50.3	46.8	50.5
31	. <u></u> .	<u> </u>	-			<u> </u>	<u>ا ــــــ</u>				<u> </u>		<u> </u>	<u></u>
-	61.7		54.8	54.2	55.4	57.1	·	56.8	54.8	54.5	57.0	53.6	55.1	53.7
	5	17 4					259							

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TABLE IX.—OCTOBER, 1873. Daily Mean Temperature at certain Stations in the Dominion of Canada.

-		-	7	1 2		1				(
	Spence's Bridge.	Winnipeg.	Little. Current.	Gravenhurst	Woodstock	Fitzavy Harbor.	Huntingdon	Halifax.	Sydney.	Truro.	Charlotte- town.	St. John.	Fredericton	Harbor Grace,
1	55.8	\$2.8	41.5	42.8	47 4	45.9	48·5	45.4	6 43·3	42.6	46.7	43.7	e 41·1	47.2
2	55.2	28.3	40.8	42.8	47.6	45.8	46.7	47.0	41.5	41.4	48.5	48.0	14.4	49.7
8	61.0	33.7	37.4	3 9·1	45.5	42.0	40.3	43.5	39.2	38.5	40.4	42.0	36.3	46.3
4	60.3	37.8		42.2	52.0	42.4	48-7	46.6	36.2	42.7	47.1	4413	39.4	42.3
5	57.0	27.2	45.6	43.6	52.5	51.1	55.3	55.3	49.0	55.8	55.7	54.0	54.0	45.5
6	62.8	47.6	81.6	35.0	89.4	40.4	45.7	58:1	58.5	61.5	60.2	52.7	\$8.0	53.7
7	60.5	54.2	45·6	86.1	40-3	39.3	41.8	60.8	63.3	62.2	57.2	52.7	48.6	64.0
8	55.5	57.3	49.1	44.6	50·1	46.3	47.0	52·1	54.4	49.2	48.3	48.0	47.3	61.0
9	81.0	53·1	50.5	53.0	50·6	48.7	46.9	47 · 3	42.3	43.0	43.1	45.7	44.3	40.8
10	53.2	43.1	58.9	56.3	86.9	83.7	49·8	48.2	39.6	43.1	48.0	46.7	45.2	43.3
11	60.0	41.4	48.9	48.0	52.1	57.3	54.0	52.7	48.1	54.1	51.7	55.3	49.8	47.7
12	48.5	45-5	40^3	39.5	40.8	42.2	48.5	56.1	55.8	54.5	52.1	53.3	51.9	55.3
13	43.5	43.7	46.8	41.0	44.1	45.9	41.3	52.3	54.5	51.2	50.4	47.3	45.4	60.7
14	43.8	40.8	49.8	44.0	27.3	69.1	50.0	46.3	46.6	42.3	48.3	47.0	43.4	51.0
15	42.3	37 `8	49-4	47.6	47.0	47.1	46.8	46.5	43.2	42.8	44.6	45.7	43.2	48.7
16	48.8	41.6	49-2	50.3	4-9	51.3	54.0	47.6	44.8	44.7	48.8	46.3	45.1	40.7
17	44.5	41-9	48 ·0	46.3	49.8	44.0	41.5	45.7	45·5	41.8	41 2	44.0	42.4	47.8
48	48.0	36.4	49.6	49-7	51.6	55.4	57.2	40.8	3 9·6	39.0	43.1	43.0	39.7	36.5
49	49-0	85.8	40-6	45.5	43.6		48.8	52 ·8	45.3	53.9	53.2	53.0	56 3	40.3
20	45.0	49.0	86.2	34.9	37·6	39.2	43.0	54.7	48.2	54.5	54.2	58.0	57.3	44.0
21	41.5	38·1	42.1	38.9	34.5	52.0	55·5	52·1	50.4	51.9	51.9	55-0	55.2	42.5
22	43.2	23.9	42.1	40.4	43.7	46.0	50.0	54.2	51.1	55.7	54.5	53.0	52.2	43.3
23	44.0	27.2	4 0·θ	43.9	49.1	53.8	58.5	49.9	54.4	43.6	50·1	48.3	47.6	49.3
24	44.8	22.5	39.6	32.6	38.1	42.9	46.0	48.4	50.6	47 2	51.8	51.3	50.1	53.2
25	44.8	23.6	39.1	36.4	37.1	38.6	40.0	46 [:] 8	48.4	44.1	43.6	4 8· 0	45.2	52.0
26	41.0	25.6	37.5	39.1	40.8	42.6	42.5	3 8·6	37.5	34.3	40.4	40.7	37.6	43.7
.27	42.0	21.4	83-8	37· 7	42.8	43.4	46:8	49.4	44.8	50.1	52.0	51.3	48.7	38.8
28	41.5	21.6		33.3	32.1	37.6	39.7	51.6	5515	52.9	51.3	47.7	46.1	53.5
20	30-2	27.8	26.0	24 · 1	30.1	30.6	34.2	51.5	54.6	50:4	46.4	44.7	41.0	58.0
30	3810	15.5	36.9	30.9	33.8	33.0	39.7	40.3	39 6	83.8	37:6	38.0	36.0	49.8
31	35.2	19.3	35 3	32.5	31.9	39.2	39.3	47:7	45.0	46.4	46.8	40.0	37.4	39.2
	48.4	35.0	42.5	41.8	43.8	44.8	46:3	49.4	47 · 4	17:4	49.0	47.9	46.2	48.1

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TABLE X.—November, 1873.

Dominion of Canada. Daily Mean Temperature at certain Stations in the

								-		-			-	-
	Spence's Bridge.	Winnipeg.	Little Current.	Gravenhurst	Woodstock.	Mtzroy Harbor.	Huntingdon	Halifax.	Sydney.	Truro.	Charlotte- town	St. John.	Predericton.	Harber Gruce.
1	41.2	23.9	35·8	31·5	32.8	36.6	38·0	o 50·2	o 56·5	47·8	6 45·1	42.0	° 39·5	56 -3
2	39.0	0.5	37.8	33.0	37.6	39.8	45.5	43.2	41.2	40.5	43.7	41.3	41.4	44.0
3	44.2	17.8	26.0	25.9	32.1	26.7	32.0	48.0	45.9	44.9	44·1	45.7	41.7	48.3
4	44.5	4.6	34.0	36.7	39.5	41.8	41.3	37.5	35.3	33 · 2	35.2	36.7	32.7	41.0
5	47.2	17.4	25.8	22.4	30.8	22.1	27.2	41.6	39·1	36.4	31.4	35.3	31 3	43.8
6	46.8	26.1	32.0	27.9	29.0	28.0	26.0	25.5	28.9	20.9	23.3	26.0	23.8	29.3
7	50.5	13.4	43.3	35.9	38.1	37.6	33·8	26.4	31.0	21.8	28.8	29.7	25.7	29 8
8	48.8	19.7	36.0	37.3	38.9	39.5	40.3	45.9	89.6	47.5	43.7	39.0	82.8	23.0
9	47.5	24.7	23.9		32.7	26.9	31 2	43.2	44.2	39.9	38.9	37.0	35.4	46 0
10	41.8	26.2	27:3	22.6	28.2	24.9	27.3	39.5	36.7	31.2	30.1	28.7	27.9	44 3
11	40.0	17.9	26.1	28.5	30.6	29.5	26.7	28.3	32.4	26.4	26.2	25.3	23.8	38 -8
12	43.2	4.3	19.7	22 3	27.7	25.8	30.2	3 6·8	33.3	33.2	33 1	34.0	28.4	32.8
13	39.2	10.6	20.6	17.5	20.7	19.0	21.0	43.9	46.4	43.8	42.9	3 9·7	34.0	46.0
14	42.5	24.0	22.2	20.2	16.1	18.1	18.8	31.1	34.6	30.3	28.2	25.3	24.0	44.2
15	43.2	32.0	33.3	26.5	2 9·9	28.8	18.7	24.2	27.7	22.3	22.5	22.3	20.5	34.3
16	42.8	33.5	i -	30.5	33.5	29.2	23.3	25-2	28.7	25 6	26.5	24.7	22:0	30.5
17	35.7	17.2	31.2	25.5	33 1	28.3	25 2	87.3	\$1.7	30.5	31.5	27.4	26-4	30.3
18	35.8	-1.9	17.0	23.6	30.7	26.1	28.0	46.5	44.3	46.8	43-6	40.0	3 4·8	37.2
19	31.8	7.8	11.0	17.6	27 1	18.9	22.8	40.5	45.3	39.9	36.8	32.7	2 9·1	54.3
20	31.5	18.4	11.8	16.0	19.7	16.2	20.3	31.0	37 · 2	2 8·5	26.9	25.3	22.5	58.7
21	36.0	10.1	17.2	16.8	21 · 4	18.1	19.7	26.8	32 6	26.4	26.4	25.3	19.8	38.3
22	35.2	9.9	27.5	24.2	27.8	24.8	19.7	36.2	33.2	33.9	32 · 2	28.3	21.7	32.7
23	41.0	24.6	23.1	28:7	25.8	26.9	19.5	2 5·8	29.5	20.7	20.8	20.0	15.5	36.3
24	43.0	19.6	23.9		3014	20.5	18.8	23.1	25.6	20.8	23.6	26.3	12.8	30.7
25	38.2	1 4	14.9		23.7	11.2	13.7	36.7	35.6	35.1	31 5	28.7	26.8	34.0
26	30.2	3.9	13.2	6.2	19.3	11.2	11.0	27:3	31.1	24.4	23.7	20.0	17.9	36.3
27	22.2	-5.2	13.2	13.9	18.1	7.0	9.8	22.8	29.0	21.1	21 · 1	16·3	11.8	34.8
28	18.7-	-13.2	16.5	10.7	17:4	8.1	8:3	35.1	33.2	29.2	25.9	21.0	17.2	3213
29	12.5	-10.5	8.6	10.8	16.3	12.2	7.0	1917	21.9	15.2	15.0	13.7	11.8	29.0
30	9.3	-0:4	4.6	8.7	16.1	-4.2	-0.3	13.8	15.0	7.4	6.5	7.0	4.5	32.8
	37.4	12.8	23.4	23.8	27.3	23.3	23.6	33.3	34.9	30.9	31.3	28.5	25.3	25/8

TABLE XI.—December, 1873. Daily Mean Temperature at certain Stations in the Dominion of Canada.

-	-				_									-	
	Spence's Bridge.	Winnipeg.	Little Ourrent.	Gravenburs	Woodstock.	Fitzroy Harbor,	Huntingdon.	Quebec.	Halifax.	Sydney.	Truro.	Charlotte- town.	St. John.	Fredericton	Harbor Grace.
1	9.8	10·9	0 13·0	10·1	17.3	-4·5	-10·3	•	8.0	16.7	2.9	7.2	1.0	-2·1	22.0
2	4.0		29.2	28 · 4	34 · 1	14.0	15.7		15.1	21.6	11.7	14.4	4.7	-2.3	24.3
3	3.2	-4.4	46.3	47.1	49.8	39.0	42.3	. 1	37.0	28.0	36.0	31.9	36.0	27 8	17.0
4	4.2	10.9	24 · 4	28.5	25.6	37.5	42.7	<i>.</i> .	48.7	47.8	51.0	44.6	46.7	46.9	40.2
5	6.5	15.2	23.3	22.9	20 . 9	30.6	30.3	. '	41.0	43.3	37.8	35.4	36.3	32.8	45.8
6	16.5	-1'4	21.9		21.5	17.0	22.5		24.4	26.2	21 4	19.7	20.3	15.7	30.2
7	21.2	19·1	27.6	22.0	23 · 9	16.6	17.0		19.8	23.7	16.7	19.0	10.7	14.8	21.3
8	23.0	21·1	34.7	31.7	33.5	22.0	26.8		21.5	20.2	18.4	22.0	21.3	16 3	19.0
9	11.3	-0.2	33.7	34.8	38.6	33 5	34.7		34.9	29.8	35.6	33.7	38.3	34.3	23.2
10	10.0	6.4	27.8	28.2	32.1	21 · 3	25.3	16.2	25.8	25.8	21.1	19.0	22.7	19.9	31.3
11	13.2	5.0	34.8	81.3	37.1	25.4	31.0	12.6	18.4	17.8	16.1	17.4	21.7	14 9	19.3
12	17.5	2.7	25.3	26.2	33.7	24.5	32.0	23.6	33.4	26.9	26.9	27.8	32.7	26.3	25.
13	22.2	6.4	21.0	15.5	2 2 ·8	11.5	14.2	13.2	26.8	24.9	22.7	21.2	21.7	17 4	21.3
14	31.0	16.2	31 · 3	28.6	26.3	14.0	19.3	10.6	23.0	25·1	17.8	17.2	18.7	14.9	26.2
15	31.0	17:1	35 6	26.7	27 · 1	18.6	16.0	5.4	8.5	14.8	3.5	4.7	7.0	4.8	17.5
16	32.8	19.4	33 6	30.2	31.6	28.0	26.0	18.6	22.6	19.8	1 2 ·3	18.0	20.3	8.4	12.0
17	26.2	14.4	35.4	32.8	33 · 4	31.2	24.7	28.1	36.8	32.6	34.2	31.2	30.0	26.1	29.7
18	16.8	8.8	29.0	34.1	34 9	27.5	29.5	28.7	35.4	33.4	34.2	32.6	34.0	28.2	35.7
19	17.5	-8·4	23.3	25.1	33.2	15.2	17:3	17.4	32.1	30.6	28.0	35.9	31.7	27.7	35∙0
20	22.2	-7.6	14.0	14.1	25.5	12.0	19.3	18.9	29.9	2 9·5	27.5	26.2	25.0	23.4	30.3
21	26.0	8.3	23.8	21.0	18.4	14.5	14.8	5.4	19.0	21.6	12.3	14.8	15.3	13.1	31.8
22	23.2	12.1	28.5	20.3	19.8	18.5	24 ·3	7.3	13.2	13 6	3.8	6.4	12.7	6.3	18.0
23	31.2	5.8	33.1	27.8	19.5	26-0	14.2	16.1	11.3	13.9	3.7	12.4	15 0	7.7	20.2
24	35.0	9.4	31.9	31.7	27.7	25.8	26.3	22.0	22.5	21.2	12.2	22.3	23.0	24.3	25.7
25	23.0	21.7	23.4	28.1	30.5		17.0	12.3	24.2	26.3	18.5	15.8	21.7	19.8	29.0
26	21.5	2.2	32.3		31.6	17.5	15.8	9.3	12.6	14.6	6.7	10.4	9.0	2.5	21.2
27	22.5	8.6	19.2	30.5	31.1	18.0	17.8	16.1	23.4	24.0	23.4	21.9	18.3	15.7	20.7
28	20.0	10.7	21.4	22.6	24.7	15.2	19.5	16.1	34.9	30.1	34.4	31·1	27.0	21.4	22.7
29	18.2	0.2	12.7	21.4	24.0	23.0	28.0	21.8	30.8	26.1	28.9	25.2	27.0	22.7	30.3
30	23.0	8.1	21.5	17.5	16.5	6.2	11.7	8.7	29.3	31.2	25.2	22.2	19.7	15.1	3 3·8
31	35.5	20.3	29.5	25.6	23.3	30.2	31.3	15.3	22.2	15.0	18.0	12.8	20.7	15-5	2 0-5
<u></u>	20.0	6.6	27.2	27.2	27.8	21.0	22.5	15.6	25.4	25.0	21.4	21.4	22.3	17.8	25.8
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TABLE XII.—January, 1874; Daily Mean Temperature at certain Stations in the Dominion of Canada.

1 28.7 18.4 32.1 . 23.1 31.8 36.2 25.1 33.1 19.2 27.6 28.2 32.0 28.2 23.5 19.8 36.1 38.3 38.4 38.2 31.3 23.2 38.3 30.5 38.5 36.6 37.3 34.3 31.0	25·8 34·8 34·2 40·2 23·2 28·2 31·0 42·7
1 28·7 18·4 32·1 . 33·1 31·8 36·2 25·1 33·1 19·2 27·6 28·2 32·0 28·2 2 23·5 19·8 36·1 38·3 35·4 36·2 31·3 23·2 38·3 30·5 38·5 35·6 37·3 34·3 3 11·0-11·0 48·0 44·6 45·8 42·5 48·5 34·3 36·0 36·1 34·0 33·1 34·0 31·3 4 15·5-21·1 26·2 40·6 46·7 55·0 56·3 44·2 41·6 38·5 44·9 40·8 41·7 . 5 20·2 8·9 21·9 18·9 23·9 18·4 22·0 29·8 41·5 40·3 38·8 35·3 37·3 37·3 6 37·6 10·9 21·3 21·4 25·8 18·8 21·2 11·5 26·0 23·1 23·1 20·7 21·7 15·3 7 39·3 21·4 22·7 28·9 29·8 30·5 34·5 <td< th=""><th>20·0 25·8 34·8 34·2 40·2 23·2 28·2 31·0 42·7</th></td<>	20·0 25·8 34·8 34·2 40·2 23·2 28·2 31·0 42·7
2 23·5 19·8 36·1 33·3 35·4 36·2 31·3 23·2 38·3 30·5 38·5 35·6 37·3 34·3 3 11·0-11·0 43·0 44·6 45·8 42·5 43·5 34·3 36·0 36·1 34·0 33·1 34·0 31·3 4 15·5-21·1 26·2 40·5 46·7 55·0 56·3 44·2 41·6 38·5 44·9 40·8 41·7 . 5 20·2 8·9 21·9 16·9 23·9 18·4 22·0 29·8 41·5 40·3 38·8 35·3 37·3 37·3 5 37·5 10·9 21·3 21·4 25·8 18·8 21·2 11·5 26·0 23·1 23·1 20·7 21·7 15·3 7 39·3 21·4 22·7 28·8 30·5 34·5 27·0 40·8 33·8 41·4 37·1 40·0 28·3 8 32·5 13·6 26·8 24·1 30·2 35·6 35·5 31·0 45·8	34·8 34·2 40·2 33·2 28·2 31·0 42·7
4 18·5 -21·1 26·2 40·8 46·7 58·0 56·3 44·2 41·6 38·5 44·9 40·8 41·7 . 5 20·2 8·9 21·9 18·9 23·9 18·4 22·0 29·8 41·5 40·3 38·8 35·3 37·3 37·3 5 37·5 10·9 21·3 21·4 25·8 18·8 21·2 11·5 26·0 23·1 23·1 20·7 21·7 15·4 7 39·3 21·4 22·7 28·9 29·8 30·5 34·5 27·0 40·8 33·8 41·4 37·1 40·0 28·3 8 32·5 13·6 26·8 24·1 30·2 35·6 35·5 31·0 45·8 40·1 50·9 44·1 47·0 39·3 9 36·8 5·2 30·5 29·0 30·7 33·7 33·8 32·9 41·9 44·2 40·9 37·5 37·7 38·7 10 25·6 -0·9 26·3 26·4 27·5 34·0 38·7 29·2 36·7 35·0 35·3 34·9 38·0 35·2	34·2 40·2 33·2 28·2 31·0 42·7
5 20·2 8·9 21·9 18·9 23·9 18·4 22·0 29·8 41·5 49·3 38·8 35·3 37·3 37·3 6 37·5 10·9 21·3 21·4 25·8 18·8 21·2 11·5 26·0 23·1 23·1 20·7 21·7 15·3 7 39·3 21·4 22·7 28·9 29·8 30·5 34·5 27·0 40·8 33·8 41·4 37·1 40·0 28·3 8 32·5 13·6 26·8 24·1 30·2 35·6 35·5 31·0 45·8 40·1 50·9 44·1 47·0 39·3 9 36·8 5·2 30·5 29·0 30·7 33·7 33·8 32·9 41·9 44·2 40·9 37·5 37·7 38·0 10 25·5 -0·9 26·3 26·4 27·5 34·0 38·7 29·2 36·7 35·0 35·3 34·9 38·0 35·2	40·2 3 23·2 28·2 31·0 42·7
5 37.6 10.9 21.3 21.4 25.8 18.8 21.2 11.5 26.0 23.1 23.1 20.7 21.7 15.4 7 39.3 21.4 22.7 26.9 29.8 30.5 34.5 27.0 40.8 33.8 41.4 37.1 40.0 28.3 8 32.5 13.6 26.8 24.1 30.2 35.6 35.5 31.0 45.8 40.1 50.9 44.1 47.0 39.3 9 36.8 5.2 30.5 29.0 30.7 33.7 33.8 32.9 41.9 44.2 40.9 37.5 37.7 38.7 10 25.6 -0.9 26.3 26.4 27.5 34.0 38.7 29.2 36.7 35.0 35.3 34.9 38.0 35.2	3 23·2 28·2 31·0 42·7
7 39·3 21·4 22·7 26·9 29·8 30·5 34·5 27·0 40·8 33·8 41·4 37·1 40·0 28·3 8 32·5 13·6 26·8 24·1 30·2 35·6 35·5 31·0 45·8 40·1 50·9 44·1 47·0 39·3 9 36·8 5·2 30·5 29·0 30·7 33·7 33·8 32·9 41·9 44·2 40·9 37·5 37·7 38·3 10 25·5 -0·9 26·3 26·4 27·5 34·0 38·7 29·2 36·7 35·0 35·3 34·9 38·0 35·2	28·2 31·0 42·7
8 32·5 13·6 26·8 24·1 36·2 35·6 35·5 31·0 45·8 40·1 50·9 44·1 47·0 39·9 9 36·8 5·2 30·5 29·0 30·7 33·7 33·8 32·9 41·9 44·2 40·9 37·5 37·7 38·7 10 25·5 -0·9 26·3 26·4 27·5 34·0 38·7 29·2 36·7 35·0 35·3 34·9 38·0 35·2	31.0
9 36·8 5·2 30·5 29·0 30·7 33·7 33·8 32·9 41·9 44·2 40·9 37·5 37·7 38·7 10 25·5 -0·9 26·3 26·4 27·5 34·0 38·7 29·2 36·7 35·0 35·3 34·9 38·0 35·2	42.7
10 25.5 -0.9 26.3 26.4 27.5 34.0 38.7 29.2 36.7 35.0 35.3 34.9 38.0 35.2	
	44.3
and the state of t	1
11 23.8 -11.7 -11.0 24.2 25.2 19.5 27.8 27.2 35.1 34.4 35.7 33.8 34.3	37.7
12 23·0 -15·9 5·0 6·0 17·0 8·0 11·7 11·0 30·8 32·2 28·6 26·1 24·7 22·7	33.3
13 12·0 -24·3 16·6 12·8 14·2 11·0 11·8 5·1 20·0 22·6 16·7 15·5 16·3 12·4	27.7
14 7·5 -16·5 3·3 14·1 15·4 11·5 11·7 8·6 24·4 22·4 22·8 20·0 15·7 9·5	24.3
15 12·0 -5·2 -4·1 -3·7 8·8 0·8 7·5 7·9 22·8 25·6 18·1 18·7 13·7 12·1	33.3
16 1.1-13.3 -5.4 -11.1 8.8 0.7 5.0 3.1 13.8 15.4 11.2 8.6 7.3 4.7	29.5
17 -3.0 7.7 27 1 14.0 13.1 11.8 10.2 1.3 10.6 12.2 6.4 9.0 10.0 5.6	21.8
18 14.0 -15.2 32.9 27.3 26.7 26.7 19.8 17.1 25.4 20.5 20.4 24.0 25.3	25.8
19 3.7 -9.9 12.7 21.7 32.5 30.9 34.5 25.4 37.9 32.3 36.6 33.8 38.0 34.5	30.3
20 -5.8 11.5 8.0 10.3 14.7 4.8 6.8 8.1 20.2 23.8 15.7 12.1 19.3 17.6	30.3
21 -5·7 -13·3 31·9 31·9 33·5 21·2 23·2 11·2 15·8 12·9 16·2 15·6 18·3 9·6	8.7
22 -10·8 -21·0 32·8 38·2 43·1 38·3 36·3 27·7 35·3 30·8 35·3 33·4 36·0 32·0	23.8
23 3.0 -25.3 15.5 26.0 28.8 26.0 32.5 29.2 42.8 40.5 44.4 39.2 40.0 41.0	35.7
24 14.7 - 28.9 10.0 12.1 19.9 17.9 21.0 9.1 28.0 29.3 24.4 21.5 24.3 19.8	35.2
25 25·3 -9·2 -3·5 -4·1 11·5 -6·1 -3·0 0·9 20·3 18·6 18·4 13·7 15·3	21.2
26 29·3 1·3 8·4 2·0 19·1 -5·8 -9·3 -21·8 -7·4 0·0 -12·7 -13·7 13·7 -15·6	19.7
27 30.7 -1.5 24.3 26.3 34.0 5.7 -0.5 -6.2 5.1 -0.5 2.7 -1.9 0.0 -8.5	10.0
28 33·0 -4·8 9·6 15·8 28·5 13·5 13·3 8·4 37·9 26·2 39·5 34·7 21·7 10·3	19.2
29 28·3 -23·7 1·8 1·1 21 3 6·0 7·0 0·8 24·3 24·7 19·8 15·9 15·7 11·4	40.0
80 22 2 - 19 9 13 9 - 8 5 6 9 - 17 2 - 12 5 - 8 9 12 1 11 9 4 1 2 5 4 3 0 1	21.8
81 29 6 14 0 2 1 10 5 7 4 -7 9 -9 0 -3 6 4 6 3 2 0 1 1 2 -6 3 -11 2	7.7
18:0 -5:5 16:7 17:8 24:4 17:7 19:2 14:6 27:2 25:2 25:2 22:8 23:1 18:4	27.8

TABLE XIII.—FEBRUARY, 1874. Daily Mean Temperature at certain Stations in the Dominion of Cananda.

	Spence's Bridge.	Winnipeg.	Little Current.	Gravenhurst	Woodstock.	Fitzroy Harbor.	Huntingdon	Quebe,	Halifax.	Sydney.	Truro.	Charlotte- town.	St. John.	<u> </u>	Harbor Grace.
1	30.0	13.8	-5·6	9 5·7	9.7	-16.0	-14.7	-6.7	Q 4·5	3.7	-1·7	° -3·7	0.3	• 1	19.0
2	29-5	9.2	3.3	7.0	13.2	-5.6	-7.5	-7.9	-4.7	-1.1	-7.5	-4.2	-4 ·0	-9.1	2.8
3	27.8	1.1	10.1	14.2	19-9	11.4	12.5	9.1	15.0	7.9	16.1	13.3	15.3	-2.0	8.0
4	27.2	-0.9	8.1		20.9	12.5	12.8	11.9	25.0	27.2	22.5	19.3	19:7	18.2	25.0
5	30.5	11.0	8.1	-2.9	15.1	-7.7	-1.5	-5.2	10.4	8.1	6.2	1.8	4.3	2.5	25 2
6	33.0	9.5	9.3	1.8	12.2	-0.6	-0.8	-4 3	1.0	-5.8	-2.0	-6.2	0.3	-2.6	8.3
7	25.0	16.8	7.4	6.2	15.0	-1 ·5	-3.7	-8.1	0.2	-1.9	-7:7	-4.5	2.7	-0.7	5.0
8	31.0	8.6	20.5	14.3	11.0	8.0	7.0	5.8	7.8	8.0	1.0	9.2	13.3		6.8
9	28.2	8.2	18.0	51.0	17.0	18.0	11.3	12.0	19.5	20.3	14.7	16.3	21.3	19.5	21.8
10	31.8	-2.3	13.2	15.8	18.0	16:8	15.8	17.5	23.3	16.7	21.0	20.6	22:0	19.7	22.3
11	20.7	12.5	-0.8	0.1	18.3	8.1	14.0	9.0	23.4	24.6	22.2	20.1	20.3	19.9	30.8
12	20.8	2.4	23.7	22.3	25.9	15.5	7.5	3.2	17.2	19-1	10.1	12.2	15.3	11.8	30.7
13	14.5	9-6-8	26:4	31.9	38.9	37:3	43.5	24.8	24.0	18.3	21.9	21.9	27.3	20.4	26.8
14	110.2	-9.0	21.0	119:3	25:3	25.7	28.3	31 · 2	40.0	3 9·1	40.8	38.2	38.3	41.3	32.8
15	20.3	0.3	34.9	26.6	32.7	32.8	31.2	24 4	28.8	26.2	26.1	23.7	28.0		29.3
16	34.5	-3.2	16.0	28.6	27-9	28.0	33.0	26.4	31.3	28.9	32.3	30.2	29.0	26.6	28.0
17	30.2	20.1	9.5		17:7	10.0	13.0	16.6	31.1	31.4	29.1	25.1	26.3	25.2	33.7
18	24.8	21.1	14:5	5.5	17 6	3.0	10.2	8:4	19.3	20.5	16.5	18.6	17.3	15.3	28.7
19	39.2	-11	32.4	29.0	32.1	27.9	23.3	16.5	23.0	23.2	21.4	21.8	24.3	18.9	24 8
20	3515	-9.1	10.0	34.0	33.2	27:2	33.2	27.8	37.8	34.9	36.5	34.9	36.7	34.9	33.8
22	34.2	15	7 19.5		31.5	24.5	21.5	16 2	33.6	30.4	32.8	26.3	32.7	27.3	30.5
22	1	1	19-1	24.9	37 2	24.0	19.8	20.6	32.6	27.4	27.1	21.9	31.7		30.0
23		1	9 8.7	25.0	26.9	28:3	33.0	20.5	27.5	20.1	24.3	20.9	24.3	20.2	19.3
24		i	į	10-1	19.7	-0.3	10.5	6.0	25.6	19-9	19.9	18.6	22.3	18.9	25.7
25			í	8.8	17:5	16.9	19.3	7-1	17:5	11.4	10.7	9.8	13.7	11.1	12.5
28		• :	1	14.8	15.3	18.9	20:0	15.2	10.9	10-3	4.4	5.2	17:3	15.1	10.3
27	4	i	- 5	1	i	17:1	18.0	13.0	2010	12.9	16.9	17.1	22:3	17.5	13.3
28	į	į	1	 25·7	29.6	1 10.4	1715	8.8	9.6	2.6	.0.1	0.5	12.0	8.8	16.0
28	}							;							
30						-		1							
	27 :	1.8	13.1	16.0) 22.0	14.0	15:3	11.6	19.8	17 3	16:3	3 15.6	18.6	15.8	27.8

TABLE XIV.—MARCH, 1874. Daily Mean Temperature at certain Stations in the Dominion of Canada.

	Spence's Bridge.	Winnipeg.	Little Current.	Gravenhurst	Woodstock.	Fitzroy Harbor,	Huntington.	Quebec.	Halifax.	Sydney	Truro.	Charlotte- town.	St. John.	Fredericton.	Harbor Grace,
1	36·0	28·5	27.0	34 2	36.6	35.5	q 35·8	18.6	14.0	0.6	10.7	° 11.8	19.3	0	-0.8
2	26.8	1.9	36.9	37.2	39.5	40.7	42.5	-30.7	32 2	17.2	22.7	17:3	35.3	29.9	17.5
3	13.7	-17:2	33.3	40.6	43.9	46 C	47:3	41.7	38.5	24.4	40.8	37.0	37.3	37.7	25.5
4	12.4	-0.4	6.6	18-1	28.8	19-0	38.5	35.6	43.1	43.4	48.8	44.7	41.3	45.6	39.0
5	21.2	19.0	10.7	18.5	24.5	14.2	14.7	12.7	34.9	38.9	30.6	26.7	30.3	26.7	39.5
6	21.2	7-7	24.8	23.1	29:1	24.2	17.5	11.9	22.4	23.0	19.2	18.4	23.7	19.6	35.7
7	28:0	-2·4	31.9	31.2	33.6	27.8	30.0	16.4	27.3	30 3	25 ·8	24.9	24.3	20.7	35,8
8	21.0	-4·4	22-8	27:8	23.7	35.1	33.0	25 3	32.6	33.7	36.9	33.9	31.0		35.8
9	15.7	4 6	11.9	14:0	19.8	13.0	17:5	25 5	32.2	32.7	31.9	30.4	31.7	31.5	36.2
10	14.2	0.5	13.9	11.3	21.7	8-0	12.0	21.5	29.8	29.0	31.5	3 1·3	32.3	31.1	38.3
11	14.3	-8 1	5.3	10.2	18.1	3.6	6.2	12.1	33 7	31.6	31·1	31.0	31 · 3	4.2	33.5
12	23.0	-10 4	3.1	9.5	12.2	2.8	3.2	3.9	27 · 7	31 · 2	26.1	25 ⋅ 6	30.7	16.4	33.0
13	32.5	11.5	13.5	12.4	13.3	10.4	9.5	12.4	23.4	25 2	22.4	20.0	18.0	16.9	31.7
14	30.2	27 · 7	14.1	11.8	23.4	18.9	19.0	17:4	33.7	30.7	32.2	32.5	30.0	27.5	32.5
15	33:5	32 4	2 3·2	25.1	28.4	26.6	18.2	21.9	34.6	31.5	30.3	30.0	30.7		32.3
16	32.5	361	26.8	31 6	33.4	32.1	21.8	24.9	34.3	31 · 4	31 · 1	32.7	35.0	33.9	31.3
17	30.2	27 5	34 4	37 1	39.7	37.2	32.2	32.5	35.7	36.2	32.2	3 5·5	34.0	36.0	35.0
18	33.0	16:5	39 · 2.	42.7	50.5	45.0	42.5	37.6	34.9	33.3	35.2	34 ·9	36.7	33.1	29.3
19	40.5	13.0	28.6	35 2	46.2	40.5	46.2	38.3	41.0	39.0	43.7	41.9	38.0	41.6	33.3
20	43.5	9.2	2 9·6	2 9·8	31 · 7	24 · 4	25:3	15.8	38 2	36.7	33.0	31.8	33.7	32.8	36.7
21	43:2	16.2	27 · 2	29.6	39.5	37.6	37.8	18:5	31 1	22.6	27.7	2017	29.7	27 3	24.5
22	43.0	-3.0	19.2	25.9	32.3	31.7	29.5	20.4	33.5	27.2	29.8	25.5	31.0		30.7
2 3	41.0	1.2	6.3	11·8	16.8	6.3	11.7	17.2	24.4	21.1	21 0	20.5	24.0	21.7	30.0
24	44.5	24.8	18.2	15.1	20.6	12.9	10.8	5.2	16.9	16 3	12.9	12.4	12.3	9 5	18.8
25	37 · 2	Ø.8	32.5	32.1	33.1	37.3	3 2 7	20.8	23.3	18·1	22.3	23.1	23.3	22.6	16.8
26	34.3	7.5	18-0	32.8	33 4	27.0	34.0	21.9	36.0	27.3	35.2	39.1	36.7	35.5	29.3
27	40.5	1.0	16.2		27.1	22.5	24.8	16.5	35.5	28-1	31.9	38.3	39 7	23·2	27.5
28	42.5	6.3	11.9	15.7	26.6	21.2	23.7	21.6	25 5	24.0	24.7	26:3	58.0	28-1	23.0
29	42.2	13.0	20.9	20.9	29.1	23.5	22.8	11 5	27:3	2318	21.0	20.3	23.7		24.3
30	41.5	4.8	17:1	19.7	31 0	26.0	29 3	22 1	2810	23.8	26.2	25 ·8	26.3	26.2	18.7
31				17.2	21 3		15.2	7 2	25.6	26.8	21 6	16.7	21.0	17.0	24.0
	31.6	9.1	20.5	24.9	30.0	25.1	25 0	20 B	30.8	27 .9	28.7	27.7	29.0	27.9	29.0

TABLE XV.—April, 1874. Daily Mean Temperature at certain Stations in the Dominion of Canada.

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	Spence's Bridge.	Winnipeg.	Little Current.	Gravenhurst	Woodstock.	Fitzroy Harbor.	Huntingdon	Quebec.	Halifax,	Sydney.	Truro.	Charlotte- town.	St. John.	Fredericton.	Harbor Grace.
1	44.8	17:1	22.9	16.5	24.1	22.7	17.3	4.9	19.6	19.0	18.3	15.9	14.3	12.2	19.3
2	48.7	11.2	19.0	23·1	31.3	36.1	34.2	23.6	26.4	24.3	26.7	23.3	23.3	22.5	21.8
3	52.2	6.1	12.1		22.0	20.8	27.5	25.3	31.6	29.6	31.4	27.9	31.0	29.3	29.7
4	49.3	13.9	14.1	18.0	17.6	13.8	14.3	16.3	26.8	28.8	24.1	20.6	21.7	19.8	32.0
5	44.7	18.3	27.5	26.8	23.1	29.6	29.0	18.8	23.4	19.7	22.3	23.1	24.0		22 0
6	49.5	11.7	33·1	34.1	30.6	36.2	31.5	28.0	33.2	29.3	33.2	3 1·0	34.0	31.2	29.7
7	49.3	15.2	27.6	28.5	33.0	35.8	37.5	33 2	33 2	34.8	33.3	33.6	32.0	33.4	34.0
8	50.4	13.7	28.5	29.8	32.2	33.6	31.2	37.0	33.5	35.5	34.1	34.1	34.0	34.9	37.0
9	56.5	30.6	21.8	30.7	31.0	30.8	31.9	26.9	33.8	31 · 4	32.4	30.1	34.3	35.1	34.2
10	49.8	17.8	27:5	31.7	35.1	34.7	29.0	25.2	29.6	26.5	27.5	25.8	28.7	27.0	23.0
11	48.0	17.7	18.7	20.8	27 4	24.7	26.0	28.5	29.8	25.6	29.3	27.1	28.7	29.2	25.8
12	47.8	35.7	24.6	23.7	23.3	24.2	19.5	16.5	27.0	29.1	24.5	24.4	22.0		30.2
13	48.0	36· 2	35.4	34.6	37.7	36.4	31.0	26.7	24.5	21.0	22.6	24.7	26.0	27.1	25.3
14	46.8	24.9	45.0	44.1	52.5	46.3	44.3	39.5	34.3	28.5	32.8	35.6	36.0	39.7	27.3
15	45.0	25.1	28.9	32.0	42.2	40.7	44.7	45.6	41.7	37.1	43.0	39.3	37.7	42.2	32.3
16	53.2	36.6	28.6	28.8	32.7	30.2	30.8	32.6	41.9	37.3	37.7	36.4	37.7	38.5	34.3
17	52.8	21.4	33.8	31.1	33.1	34.8	30.2	29.6	36.3	31.0	33.2	30.7	35.0	34 3	35.8
18	51.5	12.9	38.2	31.1	36.5	37.9	37.0	34.5	36.4	32.7	34.6	33.0	35.3	40.0	33.5
19	48.0	27.1	33.7		42.5	36.8	40.0	36.6	36.3	37.4	39.2	37.9	34.7		35.2
20	52.0	30.0	31.3	33.1	39.3	36.5	33.0	30.2	38.1	32.8	34.0	31.4	35.3	38 4	32.0
21	57.5	22.2	31.7	32.5	34.9	33· 3	33 5	31.9	32.6	28.7	31.8	29.8	33.0	32.0	27.8
22	58.2	21.6	32.2	35.4	38.8	38.3	36.5	30.6	34.5	30.2	31.8	30.7	34.7	35.8	32.2
23	61.8	34 · 4	26.6	30.9	34.0	38.7	34.3	28.0	37.1	30.4	33.4	31.8	34.0	36.8	35.0
24	60.7	38·1	31.5	29.3	33.2	33.6	31.7	32.7	38.4	29.0	37.5	36·8	37.0	37.7	36.7
25	56.8	23.9	35.1	36.2	33.1	42.2	38.8	33.3	38.5	35.4	36.9	33.8	35.7	39.2	36.8
26	54.8	26.6	33.9	34.8	33.8	40.2	34.2	33.1	32.2	31.0	32.7	31.3	33.3		34.3
27	l i	89.0	28.7	28.2	34.9	33 5	34.5	36.9	32.4	29.4	32.6	30.9	37.0	37.9	30.7
28	1 1		32.3	30.8	33.1	34.5	33.5	31.5	41.0	34.4	35.6	36.2	40.0	39.5	37.2
29	1	53.8	30.6	31.9	31.1	35.0	32 0	30.3	37.9	39.0	41.5	39.0	40.0	36.1	43.2
30		53.7	35.9	<u>.</u>	34.1	37.1	35.5	31.2	38.8	40.7	39.6	38.8	37.0	39.5	44.0
-	52 0	26.1	29.0	30.8	33.0	33.6	32.2	29.5	33.4	30.6	32.2	31.2	32.6	33.4	31.8

Table XVI.—May, 1874. Daily Mean Temperature at certain Stations in the Dominion of Canada.

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	Spence's	Winnipeg.	Little Current.	Gravenhurst	Woodstock.	Fitzroy Harbor.	Huntingdon,	Queboc.	Halifax.	Sydney.	Truro.	Charlotte- town.	St. John.	Fredericton	Harbor Grace.
1	54.8	50.6	38.6	39.4	40.3	35.6	33.2	29.9	40.6	40.4	38.3	37.3	36.7	34·2	37.3
2	55.0	1	1	41.6	39.5	38.5	35.0	35.8	40.4	36.8	38.5	37.0	35.7	36.7	33.8
3	57.0	1	1	44.1	43.7	48.1	49.0	44.7	40.4	34.6	39.1	39.0	42.7	1.	32.3
4	56.0	52.1	45.8	46.4	44.7	52.0	47.5	45.1	48.5	40.0	43.1	39.7	49.7	45.8	36.2
5	60.5	50.9	44.6	43.3	49.5	45.9	45.3	40.3	44.9	39.1	40.1	39.4	40.0	42.0	35.7
6	60.5	51.3	34.1	33.4	41.6	33.8	35.7	35.2	45.7	34.4	42.3	39.4	39.3	40.5	36.0
7	52.2	60.4	41.5	37.3	40.4	46.7	40.0	36.3	41.8	40.3	44.1	42.1	40.3	40.5	39.5
8	52.3	75.1	42.8	45.0	55.7	46.4	46.0	34.9	41.5	41.0	42.5	44.2	40.7	40.7	43.3
9	53.0	51.3	56.3	66.3	70.8	52.4	46.2	35.6	43.8	43.1	40.9	44.7	39.3	40.5	37.8
10	53.2	54.9	56.5	60.7	71.1	53.3	45.5	41.2	45.1	37.5	40.8	36.4	47.0		37.3
11	56.2	39.2	49.5	58.3	50.8	55.1	50.3	44.8	44.7	38.4	1.	41.3	45.7	47.6	37.2
12	58.0	39.1	48.3	65.8	64.0	61.1	53.8	50.8	52.7	41.1	47.0	46.2	46.7	51.5	35.8
13	57.2	47.0	44.8	55.6	63.1	63.9	63.0	57.9	55.6	50.2	50.0	50.3	43.7	59.0	41.0
14	60.5	51.2	47.0	53.0	53.5	53.4	52.5	51.1	60.6	53.3	53 6	50.6	55.3	56.6	40.8
15	61.8	45.9	47.6	57.8	58.9	61.2	58.5	47.9	53.0	42.3	46.4	42.0	48.0	52.1	42.5
16	58.0	42.9	44.4	49.4	51.9		58.2	44.8	44.1	43.8	46.4	47.8	46.7	48.5	40.8
17	62.2	47.8	42.4	44.2	46.7	52.3	55.0	48.8	52.3	49.3	51.2	54.0	43.3		38.7
18	64.2	56.5	44.9	47.9	45.5	56.4	48.0	48.2	50.7	50.8	54.8	52.5	51.7	56.2	44.0
19	68.0	45.8	49.4	47.8	48.8	49.5	49.8	12.7	46.9	47.1	56.0	55.6	46.0	52.0	43.7
20	64.2	51.6	46.4	47:3	48.3	55.9	52.0	51.6	49.0	55.1	54.9	53.4	46.0	52.6	58.2
21	65.5	57.1	49.8	50.7	49.9	51.8	51 0	47.8	56.6	50.5	56.0	49.1	49.3	52.7	5 2 ·7
22	62.8	56.7	52.0	48.8	52.1	52.0	46.3	47.7	47.6	49.3	52.1	50.4	45.0	48.6	47:3
23	61.0	61.4	50.6	57 7	56.2	58.6	62.5	49.6	50.2	48· 2	47 [.] 9	47.8	49.0	48.7	51.0
24	62.2	58.3	49.3	61.6	62.4	64.4	55.2	47.3	51.8	46.8	46.9	46.5	46.7		48.5
25	60.2	58 5	48.8	50.2	58.9	57.8	59.3	46.4	47.4	47.8	51.1	53.7	49.0	49.8	49.0
26	60.0	70.5	51.9	46.5	50.5	53.3	52.0	52.0	49.8	43.4	55·4	52.3	49.3	56.8	50· 7
27	54.0	53.2	57.6	62.3	59.2	66.1	58.5	57.0	55.7	56.3	58.7	57.8	50.0	61.7	48.7
28	59.0	52.4	60.7	72.9	70.4	74.0	70.3	61.9	61 3	63.4	56.3	60.3	50.0	66.6	53.8
23	60.0	58.1	61.8	69·4	73.0	69.7	62.0	55.5	55.1	47.5	56.0	48.6	55.0	61.3	37 · 7
80	l		69·C	1	1	75.8	66.0	49.5	53.4	44.4	50.7	48.2	53.3	57.2	46.2
31	69.0	52·4	60.0	65 · 2	67 0	68.2	65.0	49.9	53.3	#3:8	54.8	52.2	49.7	. (47.0
	59.5	52.9	49.0	54.0	54.6	55.2	52.0	46 2	49.2	45 0	48.5	48.0	46.2	50·B	42.7
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TABLE XVII.—June, 1874. Daily Mean Temperature at certain Stations in the Dominion of Canada.

	Dom	bion	01 (апаса	l.										
(10000000000000000000000000000000000000	Spence's Bridge.	Winnipeg.	Little Current,	Gravenhurst	Woodstock.	Fitzroy Harbor,	Huntingdon	Quebec.	Halifax.	Sydney.	Truro.	Charl'town.	St. John.	Fredericton.	Harbor Grace.
1	61·5	58·5	51·9	51.0	54·2	52.5	54.3	44.3	47.6	41.3	42.3	39.2	43.7	44.6	37·3
2	59.8	59.9	55.9	55.2	56.3	60.1	56.7	53.3	45.8	36.1		42.4	49.0	50.3	35 0
3	60.2	62.3	53.4	63.3	61.3	65.1	62.0	60.1	53.3	51.3	,	56.5	48.7	59.1	44.5
4	61.2	52.9	56.1	61.3	69.6	66.0	63.0	57.4	54.4	56 1		56.9	49.3	55.8	53.2
5	61.8	56.0	63.6	65.3	71.0	71.6	71.8	69.6	50.2	59.1	58.5	57 · 2	55.0	61.4	56.3
6	65.2	59.6	61.6	68.7	68.7	66.9	61.5	57.5	54·3·	54.3	58.2	57.1	55.7	66.2	53.7
7	56.5	58.1	55.2	65 · 4	67 6	67.6	68:3	55 6	51.1	51.2	62.8	58.4	63:7		41.2
8	57.5	48.3	57.0	58.0	62 1		64.5	49.8	54.4	56.2	61.9	54.8	54.0	62.5	46.5
9	66.8	56.1	56.5	59.1	67 · 8	67.0	62.5	48.7	49.8	46.8	48.1	41.0	49.3	49.8	44.3
10	67.0	58.5	54.8	57.7	64 · 4	58.9	61.7	50.8	49.7	42.6	46.1	44.5	44.7	49.3	43.0
11	63.0	54 3	50.4	52.5	51.2	64.3	52.0	51.9	53.8	45 2	49.5	46.1	53.0	52.5	46.7
12	64.8	55.7	48.2	49.3	53.6	62.5	58.8	48.9	47.4	48.6	47.2	48.4	48.3	50.5	46.3
13	70.0	60.6	56.0	50.7	53.7	57.6	53.0	51.5	56.4	45.6	50.1	50.0	50.7	54.7	41.3
14	68.2	66.3	60.6	57.8	61.1	66.2	60.0	55.2	56.5	46.2	54.1	47.8	54.0		45.3
15	68.0	67:3	54.5	62.6	58.3	67.8	66.2	65.8	58.6	50.1	56.7	55.8	58.3	60.7	47.0
16	65.2	68.1	55.9	64.8	63.7	64.8	64.3	61.8	54.6	52.5	57.4	59.4	\$2.3	64.4	48.3
17	54.5	78.2	55.7	57.9	62.7	65.7	65.7	56.8	52.3	47.8	55.5	55.1	55.0	58.0	47.8
18	60.0	72.9	63.9	60.0	64.5	66.2	60.8	53.5	52.0	47.2	55.8	51.6	56.3	56:7	43.8
19	65.0	68.8	66.0	62.9	65.9	65.5	59.0	50.8	48.7	42.6	47.3	49.2	49.7	47.3	41.5
20	61.5	74.1	63.4	70.3	64.9	66.0	54.5	5.23	49.5	42.7	50.8	51.7	50.3	50.3	43.8
21	60.8	69.3	62.3	71.8	68.7	69.9	63.5	62.8	55.6	46.2	57.9	51.8	55.3		48.0
22	58.8	65.0	74.8	76.1	72.7	74.0	73.0	69.5	59.1	54.2	63.9	55.4	56.0	64.3	51.7
23	53.2	73.1	70.1	67.6	74.5		72.5	67.8	59.5	64.3	60.4	59.9	51.7	68.8	61.3
24	59.8	74.2	60.4	59.2	68.4		58.0	57.4	55.6	52.6	51.0	49.9	55.3	57.1	57.3
25	60.8	61 · 3	57 · 8	59.3	69.5	63.0	58.0	61.4	51.2	45.7	45.5	46.8	53.3	54.7	50.0
26	63.8	66.3	63.0	58.8	68.2	64.7	56.5	64.2	56.7	46.2	51.1	51.2	58.3	00·7	49.7
27	66.5	60.7	67 - 4	67 5	67.8	72.6	67:3	69.8	62.5	56.6	59.2	62.4	55.7	64.7	55.0
28	64.5	56.6	66.6	79.1	76.7	88.2	78.2	61.1	63.8	65.5	59.8	54.2	56.7		57:3
29	64.6	61.6	57.€	65.8	73.1	74.7	71.8	61.6	55.4	53.8	59.1	59.2	56.7	60.1	48.0
30	64.6	60.7	61.8	56 5	58.3	66.2	63.7	64.0	50.1	47.7	50.7	49.1	54.0	56.6	51.3
	62 6	63.1	59.4	62.6	64.3	66.2	62.8	57.9	53.7	49 5	54.5	52.8	53.8	57.0	47

Table XVIII.—July, 1874. Daily Mean Temperature at certain Stations in the Dominion of Canada.

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	Spence's Bridge.	Winnipeg.	Little Current.	Gravenhurst	Woodstock.	Fitzroy Harbor.	Huntingdon	Quebec.	Halifax.	Sydney.	Truro.	Charlotte- town.	St. John.	Fredericton.	Harbor Grace.
1	64·1	62.2	62·9	63·1	63·0	71.0	67.5	55.6	54.9	45·8	52.6	51.8	57· 7	57.3	45.3
2	63.7	68.6	62.6	57.5	62.3	67.5	64.0	54.0	52.1	50.9	53.8	53.6	56· 3	57.0	42.8
3	61.8	70.7	63.2	59.7	63.5	65.5	60.0	57.1	49.9	51.8	52·3	53.5	53.0	54.3	42.3
4	64.1	76.0	61.5	58.9	70.3	64.5	63.2	59.7	53.3	47.2	56.8	52.9	52.7	58.4	55.5
5	67 · 4	67 · 8	70.7	66.1	68.3	70.2	65.0	57.7	50.8	50.8	55·1	53.9	54.3		49 5
6	67.0	70.5	70.9	73.9	71.5	71.7	68.3	64.0	57·2	49.9	58.1	55.4	58.0	59.7	46.2
7	65.1	67:6	70.1	67:4	78.5	74.3	72.5	71.7	57·1	57:3	56.7	60.0	52.0	61.4	54.5
8	62.9	70.6	70.6	69.3	76.7	73.0	72.2	68·1	58.5	59.1	61.9	63.3	55.7	65.6	57· 2
9	70.9	64.1	68.7	70.7	72.4	70.7	66.2	69.8	68.4	64.1	61.3	65.1	62.0	67.0	56.3
10	74.0	61.7	66.9	70 6	71.4	71 · 4	67.2	66.7	66.6	61.0	62.5	66.9	64.3	67.9	59.2
11	73.4	69.5	61.9	63.8	65.9	63.3	66.0	68.2	64.4	64·5	63.9	65.4	57.7	70.7	61 · 4
12	65.0	71.7	63.7	61.8	58.3	68.3	61.8	60.3	68·4	63.2	64.1	61.0	61.0		64.3
13	63.4	66.6	68.3	61.5	65.0	64.7	66.0	58.4	63.2	61 · 7	66.9	65.3	57.7	67.6	64.8
14	66.7	63.2	74.0	74.9	73.7	75.2	74.5	67.8	66.6	66.8	66.3	68.2	60.3	39.9	66.5
15	71.9	60.2	67 · 1	74.1	76.9	79 8	78.3	70.2	69.2	70.7	67.0	71.5	60.3	73.7	61.7
16	76.3	66.0	60.3	59.3	59.1	65.1	66.0	69.1	67.2	74.4	68.3	71.6	57.0	76.0	62.8
17	68.2	72.1	60.5	61.6	58.7	69.5	63.3	63.9	64.2	60.7	64.1	61.2	65.0	71.0	69.3
18	70.0	69.1	70.8	69.€	71.2	73.4	68.2	69.5	62.6	59.1	63.2	65.0	6i · 7	69.2	58.3
19	74.5	57.8	67.5	79.7	74.6	78.5	77.0	74.8	64.7	64.0	64.2	68.9	56.3		60.0
20	76.0	66.1	59.8	61 · 1	65.2	66.1	65.7	66.4	60.1	63.6	63.0	66.3	55.7	64.9	68.0
21	75.4	72.0	65.3	61.4	62 · 4	66.7	63.8	64.4	60.7	62.0	64.3	60.5	58.7	65.6	65·2
22	74.0	70.7	70.8	65.4	64.2	72.0	65.2	66.2	67.7	61.4	60.7	61.5	64.0	64.4	63.7
23	71.9	67.0	70.1	66.4	66.0	74.1	69.3	69.2	62.9	58 4	62.1	64.1	61.7	63.9	58.3
24	60.4	71.0	66.4	74.8	73.0	75.3	70.2	71.3	62.0	63.6	62.5	68 1	60.3	69.1	58.7
25	66.2	59.0	73.9	79.6	75.0	79.8	76.8	75.0	64.6	68.3	62.0	69.6	60.3	69.3	58.8
26	69.5	58.3	65.4	70.6	71.8	77.4	79.2	76.8	63.4	67.5	62.8	67.3	58.7		71.7
27	71.9	64.7	61.9	63.7	61.7	67.2	65.0	64.6	64.1	66.4	67.5	69.1	59.0	66.4	68.2
28	68.0	63.9	65.9	58.8	62.5	67.0	1	63.9	68.1	73.0	71.8	68.3	62.3	64.2	70.7
29	65.5	1		ŧ	62.8	68.1	1		68.3	67-1	66.7	68.5	61.3	66.7	70.5
30	1	69:4	67 4	67 4	64.7	72.1	66.3	İ	64.8	66.5	65.3	63.4	64.0	65.1	69.2
31	65.0	-	64.5	_!	70.5	69.4	65.7	62.8	66.8	65.6	64.8	66.8	-	55.0	65.3
-	69.4	66.6	66.4	167.3	67.3	70.7	67.7	67·7 269	62.4	61.5	62.2	64.1	59.5	65.6	60.5

TABLE XIX.—August, 1874. Daily Mean Temperature at certain Stations in the Dominion of Canada.

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	Spence's Bridge.	Winnipeg.	Little Current	Gravenhurst	Woodstock,	Fitzroy Harbor.	Hurtingdon	Quebec.	Halifax.	Sydney.	Truro.	Charlotte- town,	St. John.	Fredericton	Harbor Grace.
1	62.4	69·7	63.8	64.8	69·6	69.6	66·5	62·4	64.6	59.8	66.0 e	66.7	29.0	63·4	66.0 6
2	64.7	61.6	61.2	56.2	59.7	60.8	58.3	62.4	63.4	66.7	66.8	59.2	60.7		66.0
3	66 3	65.6	61.7	55.7	59.3	60.5	56.0	, 55·0	63.2	64.2	59.8	60.4	61.3	59.2	67.0
4	68.4	63.2	63.9	59.4	61 · 1	63.2	62.3	59.8	60.3	61.4		61.4	57.0	59.4	66.5
6	69.8	67.1	65.2	63.5	61.7	66.1	61.5	62.3	59.7	58.2		58.5	58.7	61.3	64.7
6	67.0	66.5	64.8	68.9	64.6	69.1	64.5	62.3	54.9	56.0		5 6·7	56.0	57.3	53.0
7	70.1	68.9	69.4	68.2	69:4	71.3	63.5	63·1	60.8	59.8	60.8	64.6	58· 3	65.4	57.0
8	72.1	70.0	71.1	66.3	70.0	73·1	67.2	65.4	62.5	63·4	63.2	65·1	59.0	61.6	63.2
Ð	73.5	69.5	72.5	75.7	70.3	74.2	69.5	70.7	63.0	62.6	68.8	65.8	63.0		64 0
10	65.2	68 · 4	70.0		72.9	٠	70.3	66.9	60.4	63.9	65.9	66.9	66.0	64.9	64.8
11	65.5	63·1	75.0	75.8	74.1	77 · 4	71.0	72 2	69.2	64.8	65.7	67 · 4	62.7	69.4	67.3
12	62.6	62 0	66.1	72.2	80.0	78.8	74.8	78.3	67.2	71.5	69.0	70.3	58.7	69.5	66.7
13	61.3	59.7	61.0	6 5·7	67 · 7	66.8	63.0	61.3	67 · 4	66.4	62.8	60.4	57.0	61.7	66.8
14	62.0	61.9	63 4	62.8	65.2	64.3	61.0	61.4	60.0	58.0	60.1	59.5	56.7	59.9	57.7
15	61.5	68.7	6 5 ·2	64.1	65.9	66.4	63.8	64.2	59.8	59.7	60.0	58.3	58 0	61.7	28.0
16	66.8	59.1	70.4		67 · 7	69.6	63.5	63· 5	62.7	58.2	57 1	60.3	58.7	•	52.3
17	65.5	58.2	67.8	76.6	72.2	72.5	72.3	68.3	60.2	59.2	59.8	65.4	58.3	60.6	53 ·0
18	67.4	60.1	64.0	63.3	67.8	66.6	65.8	69.4	62.6	66.3	66.3	6 8· 4	59.0	64.1	61.7
19	70.0	63.8	65.2	62.8	68.8	64.5	62.5	62.4	63.2	61.6	59.6	62 7	62.0	61.8	62.3
20	70.4	64.8	67.3	63.4	73.5	69.7	66.0	60.4	59.3	59.2	5 7·5	60.1	57.0	£9. 0	61.8
21	69.6	61.8		59-9	67.0	62.2	60.3	60.1	65.2	61.3	63.1	62.8	65.0	62.4	59.8
22	70.4	63.6	53.9	53.8	63 . 5	55 9	51.2	56.9	60.3	57.7	55.2	57.7	59.7	54.9	62.7
2 3	71.0	63.8	159.5	55.3	61.0	55.7	52.8	55.1	57.7	54.3	54.0	58.3	54.7	•	57.0
24	74.9	64.1	63.0		61.3	60.0	54.7	56.8	56.9	54.0	55.2	56 · 6	58.3	56.1	59.3
2 5	75.6	66.6	5 9 ·9	56.5	63.1	65.0	58.8	60.6	57.3	53.5	53.5	57.0	<i>57</i> `7	55.3	58.3
2 6	7 3 ·6	68.3	('	57.8	61.6	69.1	63.0	63.8	58.3	53.6	54.4	56.8	59.3	66.3	59.3
	69.0	ſ	1	60.6	60.5	60.5	61.7	63.5	58.7	56.7	56.7	59.6	56.7	67.2	52.5
	64 1		1	i	1 1	65.4	64.0	67:2	ļ	56.8		59.6	58.3	59.3	67.5
	63 9		ŀ	ł	62.1	64.8	62.5	66.3	62.6	61.5	71.4	68.0	61.3	60.7	63.6
	62 0	:	1	1	!	69.4	65.8	60.0	62.7	65.6	67.3	68.5	62.0		63.5
	56.6		 	 	65.2	66.4	61.5	63.3	60.1	66.3	61.3	65.8	55.3	65.8	56.5
	67.6	64 4	164.9	64.5	65.9	66.6	63.3	63·1 270	61.3	60.7	61.3	63.3	60.0	61.1	90.8

Table XX.—September, 1874. Daily Mean Temperature at certain Stations in the Dominion of Canada.

											-1 -1				
	Spence's Bridge.	Winnipeg.	Little Current.	Gravenburst	Woodstock.	Fitzroy Harbor.	Huntingdon.	Quebec.	Halifax,	Sydney.	Trure.	Charl'town.	St. John.	Fredericton.	Harbor Grace,
1	59·2	9 57·4	63·0	63.9	64·6	68·7	60.7	60.7	60.4	63·6	60.3	58.8	57·3	55·4	60.5
2	64.1	51.2	72.9	66.7	67:3	67.8	65.0	64·1	58.4	58 5	58.2	58.9	58· 3	58.6	55.0
3	66.0	60.6	5 3 ·6	51.1	59.8	55.3	57.3	54.5	62.5	60.1	60.9	62.8	56.0	58.4	55.0
4	68· 8	61.4	61.6	53.7	56.4	56.7	52.5	53.6	55.8	54.7	52.5	5 5·7	54.3	32.8	56.3
5	66.0	58.6	60.4	66.5	64 · 7	66.3	63.5		58.2	58.2	51.5	61.9	54.7	56.1	56.3
6	62.7	64.6	59.9	62.5	61 · 9	66.5	57.5	65.0	5 9·7	60.7	61.2	63.4	55.7		60.8
7	58.0	71.3	64.1	63.3	67.6	63.7	62.3	60.8	62.6	62.3	63·1	60.9	63.7	64.5	61.5
8	56.1	73.1	66.7	65.2	73.2	64.5	59· 2	61.7	60.1	56.0	56.3	53.2	62.0	60.2	56.7
9	56.1	75.1	73.5	66.2	70.8	69.4	63.3	63.0	56.9	52.6	53.7	58.4	56.0	58.4	50.2
10	56 ·2	60.2	75.2	71.4	74.3	74.5	68 ·2	65.1	60.6	55.1	53.6	58· 2	64.7	63.6	53.0
11	56.9	50.6	71.6	70.1	75.2	68·1	63.3	60.1	53.9	48.5	48.8	53.0	58.7	54.2	53.3
12	57:1	54 · 3	68.4	72.2	70.9	63.0	57.0	53.2	51.5	50.0	50.2	48.9	51.7	51.7	50.2
13	57.8	56.0	63.8	71.2	72.3	73.0	60.8	58.0	52.7	49.5	47.8	52.7	52.3		44.7
14	59.3	41.0	65.6	73.1	75.0	73.7	66.0	63.6	56.9	54.5	55.6	60.2	55.0	57:3	58.2
15	60.9	48.5	57.5	62.0	66.7	67.9	67 · 5	68.1	59.0	60.5	57.0	61.9	56.0	60.2	50.2
16	55.7	50.3	53.9	50.1	55.8	56.2	56 3	58.2	58.4	58.9	62.0	60.7	57.7	61.4	55 8
17	55.9	51.4	58.7	57 8	59 · 2	59.1	54.5	53.2	58.1	52.9	55.1	53.0	56.0	55.6	52 ·0
18	53.2	47.9	66.6	63.4	66.8	60.9	55.2	49.9	53.1	48.8	53.3	52.9	52.0	52.6	45.7
19	56.0	45.7	63.8	67.4	68.8	66.5	62.3	57.7	54.8	52.5	58.5	56.1	57.0	56.8	50.7
20	55.2	44.2	47.7	50.4	52.5	61.3	57.8	60.5	59.5	59.6	65.6	64.7	65.0		58.3
21	58.1	51.2	48.8	44 · 4	50.0	47.6	46.2	52.3	62.9	62.9	65.3	62.0	61.3	60.4	66.0
22	59.5	56.7	54.7	56.0	50.9	54.7	53.0	49.8	57.0	54.0	51.6	51.3	54.0	49.9	62.8
23	63.1	56.2	60.8	55.6	55.9	57.1	54.0	51.8	50.6	45.7	46.5	53.8	51.3	51.0	52.0
24	60.1	64.8	65.0	87.9	60.3	61.2	54.2	56.2	53.5	46.0	49.1	54.7	54.0	52.9	48.0
2 5	55.4	61.4	65.9	57.1	62.4	63.4	62.5	59.7	54.4	46.0	52.3	5 8·5	53.7	53.8	48.5
2 6	56.8	49-4	65.6	66.2	66.8	64.1	63.2	60.0	53.1	48.1	50.3	57 · 4	54.7	57.7	49.0
27	62.0	50.6	56.5	61.2	61.1		62.0	55.5	55.5	46.6	49.2	56.1	59.0		54.3
2 8	63.9	47.3	56.9	55.9	54.0	65.2	62.0	57.6	60.2	52.3	65.4	61.5	61.3	55.7	55.2
29	60.5	45.2	52.9	49.6	52.9	57.5	55.0	55.8	60.8	60.7	63.4	63.7	60.0	65.4	
30	55.0	52.6	46.5	45.3	45.2	49.3	46.5	49.3	60.3	62.0	61.3	62.4	57.3	59.5	
	59-9	55.3	61 4	61.4	62 · 4	62.9	59.3	57·5 271	57.4	54.7	56.0	58.5	57.2	57.1	54.3

Table XXI.—October, 1874. Daily Mean Temperature at certain Stations in the Dominion of Canada.

	Spence's Bridge.	Winnipeg.	Little Current.	Gravenharst	Woodstock	Fitzroy Harbor.	Huntingdon	Quebec.	Halifax.	Sydney.	Truro.	Charl'town.	St. John.	Fredericton.	Harbor Grace.
1	55.6	0 47·4	44.9	45.9	47.8	48.7	46·5	43·6	o 53∙7	55·2	٠.	52·5	48.7	47·2	65·6
2	57-2	40.3	46.4	42 ·8	48.9	48.8	49.3	46.8	54.7	5 2 ·5	55.8	55.9	54.0	50.7	53.5
8	54.3	44.2	45.4	41.6	44.9	43.0	43.5	43.1	5 5·6	58 ⋅ 2	54.4	56.2	53 0	50.4	57.6
4	62.2	53·1	43.8	45.0	41.5	44.0	41.2	43.6	46.6	49.1	45.0	48.6	45.0		54.6
5	61.5	45.8	49.1	45.2	44.8	43.5	41.8	46.5	47.7	48·2	45.1	48.2	48.3	48.9	48.0
6	59.0	47.1		45.1	50.9	48·3	46.2	49.0	48.4	49.5	44.1	47.5	48.7	48.3	43.2
7	55.0	58· 2	48.9	49.1	5 0·5	55.0	53.5	51.7	49.4	48.9	45.9	53.7	50.3	47.5	48.8
8	64.7	52·0,	47.6	55.1	52.0	58.5	55.8	53.2	49.7	52.7	48.0	54.8	49.7	48.6	53.0
9	59.4	49.4	56.0	51.8	51.5	58.3	54.0	51·1	56.8	52.4	57:3	56.3	51·3	48.5	52.3
10	58.5	37.8	50.7	49.7	50.1	56.0	54.0	54·1	55.8	57.6	57.4	58.0	54.3	54.6	53.7
11	60.2	27.0	40.5	44.0	44.7	51 ·5	49.7	49.7	56.5	57.5	48.6	58.7	53.7		54.8
12	57.3	34.8	34.2	33.9	38 8		39.3	39.8	51.2	53.5	44.8	53.3	50.3	47.7	54.3
13	54.9	43.7	32.3	34.0	34.0	36.7	36.0	38.0	46.2	48.2	42.0	47.9	47:3	45.1	49.8
14	52.8	48.6	41.6	33 · 1	36.3	42.8	40.2	43.2	45·1	49.1	45.1	44·3	45.7	42.4	49.0
15	56.1	48.0	49.9	35.6	40.8	47.5	44.2	43.7	47.7	48.5	47.0	49.4	47.7	45.8	48.7
16	52.8	47.0	51.3	42.6	47.0	48.7	48.5	47.8	49.7	50.8	49.8	52.4	52.3	48.8	49.0
17	52.0	42.7	47.7	44.8	49.4	52.0	51.3	51.9	52.6	52.4	55.1	54.7	52.3	48.1	48.3
18	49.0	54.4	38.4	36.1	40.6	39.8	39.7	42.9	53.9	57.8	43.6	53.7	48·0		56.3
19.	42.2	37 · 4	43.7	35.3	39.2	37.5	35.8	39.3	46.3	53.3	40.8	45.0	43.0	43 5	59.8
20	43 2	34.7	47.4	45.3	21.3	43.2	48.7	40.9	43.8	43.1	42.3	43.3	46.3	45.4	50.0
21	46.8	45.7	38.4	30.8	42.6	36.1	36.5	38.0	45.7	43.2	40.8	44.8	48.0	44.7	47.7
22	54.5	53.1	41.6	36.8	44.8	37.6	40.5	41.8	44.2	43.2	32.6	42.2	46.3	41.7	44.3
23	45.0	55.3	47.6	42.3	46.2	40.3	41.2	38.2	37 3	40.1	35.7	38.8	40.0	34.6	39.7
24	36.8	54.4	50.6	48.2	53.1		45.3	42.8	39.9	40.5	47 9	46.3	43.3	35.2	42.2
25	42.0	48.4		53 1	58.2	52.2	50.7	48.1	44.0	45.4	47.2	49.9	45.7		45.8
26	36 6	35.4	55.4	58.1	58.9	58.5	59.0	49.8	46.4	49.3	48.4	49.9	47.0	47.0	49.2
27	34.6	l .	!	47.1	53.3		56.8	55.5	46.9	51 2	47.8	51.9	50.7	52.9	48.8
28	1	<u> </u>	ì	,	45.1	ì	42.0	45.2	47 3	49.4	47:8	52.8	52.7	52.0	48.7
29	į.	ì	46 1	i	i	49.5	55.2	38.2	50.1	44.8	46.5	43.8	50.0	46.7	44.5
30		(33.9	1	1	44 6	46.8	43.9	52.8	48 4	51.9	50 5	52.3	49.4	40.7
31	.	ļ	28.9			31.0	38.0	36.1	46:4	47.4	45.2	47.2	47.0	41.3	49.3
	50.3	142.4	44.7	143.8	46.4	46.3	46.3	$\frac{ 44\cdot7 }{272}$	48.7	49.7	47.1	50.6	48.8	46.5	50.1

TABLE XXII.—November, 1874. Daily Mean Temperature at certain Stations in the Dominion of Canada.

	Spence's Eridge,	Winnipeg.	Little Current.	Gravenhurst	Woodstock.	Fitzroy Harbor.	Huntingdon	Quebec.	Halifex.	Sydney.	Truro.	Charlotte- town.	St. John.	Fredericton.	Harbor Grace,
1	33.5	32·1	32·3	31·5	32 5	96·3	33·3	30.9	o 41·6	o 43·7	o 37·2	99. 6	44·3		49.0
. 2	35.0	28.1	34.6	32·5	43.3	36.2	37·2	33.7	36.6	39.0	33.4	37 4	39.0	33.9	40 5
3	37 · 9	27.9	43.4	43.4	46.9	43.7	43.8	40.0	39.5	37.3	37.2	41.9	40.7	36 8	34.5
4	41.5	34·1	51.8	43.4	46.5	44.0	3 8·0	36-8	43.6	41.9	37 ·3	46 3	47 7	40.6	42.5
3	36.7	26.9	53 · 4	50 0	51.6	48.6	48.7	43.1	41.9	46.0	43.0	48.6	47.7	45 4	46.8
6	35.2	37.6	46.8	42.0	46.9	45.6	48·3	46.4	49.6	47.5	47:8	48.5	50.3	47.9	51.7
7	41.7	31.9	51.7	41.3	42.9	40.6	41.5	37 • 4	40.4	40.8	37.1	36.2	37.3	38 7	35.0
8	35 5	30.0	51.8	55.3	53.4	53.3	46.0	39.6	37.6	36.4	3 5 5	38.6	37 . 7		35:8
9	33.6	25.9	51.9	43.2	46.3	48:5	47.0	44.9	42.4	42:0	40.3	42.3	48 0	45.6	43.7
10	29.0	22 2	34.5	37:0	44.9	36.0	40.0	36 5	44.9	41.3	41.8	41.0	43:0	41.5	45.7
11	25 1	22.7	28.8	30.1	35.7	31.6	32.8	30.8	43.2	43.4	37.6	41 6	40.0	36.4	41.3
12	29.5	25.3	22.7	23.8	29.4	25.5	27 5	27.1	32.8	36.6	31.9	31.9	32 0	29.9	41 3
13	31 9	18.6	21.9	19.9	25 6	22.6	25 0	26.7	29.7	33.3	29.4	29.4	30.7	28:9	38.2
14	29 0	16.5	30.1	22.6	25.8	24.2	21.0	23.3	29.7	31.9	27.8	29.1	28	28:7	33 8
15	31.2	9.6	37.8	33.3	38.6	31.8	31.0	23.1	29.7	31.0	28.6	27.1	27.3		32.8
16	17.9	-8·£	37 · 2	33.6	36 8	33.7	33.0	25.7	33.5	34.2	32 2	31.9	32.7	31.3	30.7
17	10.6	-8∙8	37.8	40.1	46 6	35.2	39.0	28 5	34.1	34.6	32 3	35.4	33 7	27.6	29.3
18	10.0	6.6	23 9	26.2	32.3	24.0	28.8	26.6	41.4	39.2	39.6	37 · 3	41 3	39 1	31.0
19	13.1	8.1	26.1	25.5	27.0	25.5	26.5	15.8	23.7	27.7	18.4	18.1	18.7	17.6	28.0
20	14 9	11 1	28.1	27.7	27 0	25.6	27.5	24.8	27.4	24.8	22.8	24.9	25.7	23 9	23 7
21	23.9	18.0	18.6	22.6	26.0	21.0	25.8	23.4	38.7	34.2	34.2	33.9	30.7	29.2	29.5
22	14.7	4.8	25.1	19.4	28.6	10.9	10.2	12.6	25.2	31.2	20.7	21.7	19.0		33.0
23	15.3	-5.1	25.7	33.7	36 6	26.7	31.0	16.6	26.3	28:9	26.1	26.6	22.3	11 0	33.0
24	20.2	-4.0	18 6	21.5	22.9	25.5	28.5	25.4	43.9	41.3	42.3	39.0	38-0	36 :0	36.2
25	12.9	-2.2	11 6	18.2	24 3	11.5	19.0	22.9	37.2	37.2	35.2	33.7	32.3	30.9	40.0
2 6	2-4	-8.6	27.2	27.3	28.4	16.9	19.8	16.5	31.5	33.7	28.8	28.3	27.3	21:8	37:0
27	4.6	-17:7	26.8	32.1	37 · 3	39.0	38.0	23.7	31.2	33.9	30 ·5	32.5	32 0	20.8	29.3
28	17.2	-18.8	22.3	24.8	26.6	26.0	31.7	30.4	41.4	38.1	35 5	36.7	42.7	31 3	37.5
29	27.0	1.8	9.6	15.0	20.1	20.8	25.5	22.0	50.5	43.5	55.1	47.2	45.3	a	37.0
3 0	33.9		3.5	8.0	10.1	-5.8	1.3	7.7	53.4	41.0	30.0	26 9	24.7	20.6	8.0
	23.9		31 2	31 · 6	34.7	30.2	31 6	27.2	36.8	37.2	34.4	35.2	35.6	32.0	37.2
	5-	-18						273							

TABLE XXIII.—DECEMBER, 1874. Daily Mean Temperature at certain Stations in the Dominion of Canada.

	Spenoe's Bridge.	Winnipeg.	Little Current.	Gravenhurst	Woodstock.	Fitzroy Harbor,	Huntingdon,	Quebec.	Halifax,	Sydney.	Truro.	Charlotte- town.	St. John.	Fredericton.	Harbor Grace.
1	38.2	0 18·1	0 25·4	21.9	21·3	•	0 14·7	o 4·7	o 21·4	25·9	16·6	19.0	16.7	° 11·9	33.7
2	38.4	6.9	37.2	33.0	34.9	29.5	33.0	20.2	33.1	30.9	31.7	31.7	32.3	24.7	33.7
3	30.1	8.6	14.5	22.1	37·1	27.8	35.0	30.3	41.6	39.8	37.8	39.3	43.0	36.2	36.5
4	38.0	18.2	20.8	12.9	20.8	3.5	12.2	14.9	34.4	38.8	31.1	28.2	30.0	27.2	45.3
5	35.9	29.1	33.8	28.1	28.9	14.5	19.8	11.7	27.0	32.1	26.5	27.5	25.7	18.4	31.0
6	35.0	20.9	33.7	30.9	32.2	26.7	27.5	23.4	33.0	31.8	30.0	30.2	30.7	.	31.7
7	37	25.3	8 9	18.9	27.6	21.0	32.2	29.1	44.4	43.5	40.7	35.6	36.7	32.2	35.3
8	37 · 9	20.2	20.2	13.1	21.0	1.3	11.0	15.7	35.8	42.6	34.5	31.7	29.7	28.3	53.3
9	37.5	7.6	21.7	20.9	30.5	•	27.5	15.1	31 2	31.7	27.8	27.3	27.7	17.9	38.0
10	37.2	-1.5	22.3	20.2	25.2	13.2	18.3	11.7	34.6	35.4	31.2	26.9	28.3	17.3	38.3
11.	36.0	-13.2	11.7	13.1	22.7	10.6	19.5	17.0	27.1	31.3	29.6	25.5	24.7	10.9	32.2
12	34.7	-2.7	9.0	8.4	17.8	1.0	7.3	-3.3	20.3	27.4	13.2	11.1	13.0	6.0	34.0
13	39.0	-10.3	13.0	16.9	23.0	8.0	9.5	-1.4	15.7	14.3	8.1	5.1	8.3		22.2
14	38.9	10.2	-10.8	-4.3	9.3	-2·8	0.8	-1.5	33.6	32.3	26.6	19.4	10.3	6.6	27.2
15	32.4	22.8	23.3	0.4	1	-12 4	-15·5	-9.3	6.4	21.3	4.7	10.4	-2-7	-4·2	40.3
16	31.5	-7.0	32.6	27.0	29.2	9.5	10.5	1.4	16.3	5.	15.2	21.7	4.7	0.7	31.2
17	35.2	16.6	7.7	}	28.8	14.5	11.5	18.9	22.3	27.1	21.9	21.1	21.3	11.4	37.7
18	32.5	22.4	29.8	22.6	'23·1		16.8	5.2	25.8	29.5	20.7	20.9	18.0	16.0	34.8
19	26.7	-5.0	27.1	1	29.1	18.5	22.2	12.0	20.7	22.0	16.4	14.2	17.0	7.4	32.3
20	27.7	17.0	24.7	i	25.3	6.5	11.2	12.9	23.6	23.4	16.8	17.2	17.7		28.3
21	27.9	3.2	26.9	Į.	24.5	6.5	-7.5	0.9	19.5	22.4	i 18·4	16.4	9.7	2.8	26.0
22	26.1	6.7	30.6	i	32.3	16.0	18.2	11.7	20.0	20.3	19.1	20.5	20.0	5.2	18.3
23	28.5	-1.3	(l	30.9	29.2	29.0	25 8	36.8	33.5	35·8	32.5	37.0	33.7	25.8
24	27.2	-11 · 4	i	ĺ	25.5	24.5	30.3	27.9	32.6	33.2	31.9	32.0	34.3	29.1	33.2
25	25.1	1.8	}	i	21.8		8.5	11.7	29.0	29.9	25.8	2 3·0	24.7	24.5	31.24
26	19.0	8.0			30.6	10.5	11.5	11.0	20.2	20.0	13.6	12.8	19·0 	10.0	26 5
27	30.0	-7:3	1	}	28.5	19.5	24.0	22.0	30.5	25.6	20.5	19.2	28.3		28.3
28	1		1	i	38.5	30.2	36.0	20.0	32.7	28.3	28.2	26.6	33.7	25.9	22.0
29	1	-26 1	i	Ì	2 20.9	6.5	16.0	29.0	33.4	33.7	31.3	24.4	28.7	28.4	33.0
30	1	1	1	1	3 11.7	-14.5	1	-11.5	6.3	5.2	-0.1	8.1	-0.3	-3.2	9.3
31	i	- 2.4	-	.	1 12.0	-10.0	-3.8	-12.1	3.4	9.3	1.8	0.8	1.3	4.3	14.0
•	32.0	4.1	1 20.2	18.4	124.9	11.5	15.6	274	26.2	28.0	22.2	21.4	21.4	15.6	31.1

Table XXIV.—Means of Daily Temperatures at the Stations in Tables VIII to XXIII collected in Five-day periods, from September, 1873, to December, 1874, inclusive.

	Spence's Bridge. Winnipeg.	Little Current.	Grevenhurst Woodstock.	Fitzroy Harbor.	Huntingdon.	Quebec. Halifax.	Sydney.	Truro.	Charlotte- town.	St. John.	Fredericton.	Harbor Grace.
September 3 to 7 inclusive	69·5 49·	6 55.6 5	6.1 59.0	58·7 (57.8	59	° 1 ₁ 57·7	59·9	57·7	55·8	57·5	55· 4
,, 8 ,, 12 ,,	66 8 51	5 61 · 2 5	59· 1	62.1	60.8	. 56	0 54.7	54.1	58.7	52.5	55.2	54.6
, <u>T</u> 13 ,, 17 ,,	63.0 43.	6 47 · 0 4	4.5 46.7	48.3	50.3	. 55·	4 56.0	53.3	54.2	51.5	51.0	57.7
, 18 ,, 22 ,,	58.3 43.	7 51 8 4	8.151.1	54.0	53.1	, 53	7 50.9	50.6	54.9	51 · 3	50.3	50.4
,, 23 ,, 27 ,,	52.3 42.	7 55 8 5	5.2 58.3	60.0	58:3	. '55'	6 51.9	54.5	54 ·3	52.6	52.8	49· 2
, 28 ,, Oct. 2 ,,	55 · 3 32 ·	2 47 4 5	[0.0]53.9	53.6	55.0	. 55	0 50 8	51.3	51.6	51.7	53.2	51.3
October 3 to 7 inclusive	60.3 40.	1 40 1 3	9.2 45.9	43.0	16.4	. 52	9 49 2	$52 \cdot 1$	52.1	49.1	47 · 2	50.4
	· (1 1	8.3 49.8	- 1	- 1	1	3 48 1			ĺ		
	44.6 41.	0 48 5 4	5.8 49.6	47.5	6.7	- 1	7 46.9		ı i			
,, 18 ,, 22 ,,	45.3 36.	6 42 2 4	1.9 42.2	48.24	16.8	. 50	9 46.9	51.0	51.4	52·4	52·1	41.3
·,, 23 ,, 27 ,,	43.3 24.	1 38 · 1 3	7 9 41 6	44.34	16.8	. 46	6 47.1	43.9	47 · 6	47 . 9	45.8	47.5
" 28 " Nov. 2 "	39.0 18.	1 34 4 3	0.9 33.1	36 • 0 3	39.5	. 47	48.7	45.3	45.2	42.3	40 2	50 ·1
						i					ļ	
November 3 to 7 inclusive	46-4 15-	32.2.2	9.8.33.9	31 · 2 3	9.1	. 35	38.0	31 • 4	39.6	34.71	27.0	90.0
0 19		1	7.7 31.6	- {	1	1	37.2		,			_
12 17	- 1	l i	4 · 8 26 · 7	- 1		. 31.	1 1		- 1	ì	- 1	
	ł	1 1	9 6 25 3	ł	- 1	- 1	38.5	- 1	- 1	- 1	,	
T T	i	1 1	3.0 23.5	- 1	1	. 27:1	1 1		1	- 1	1	
	10.8 -3.0	14 4 13	3.7 20.2	5.1	,	. 17.7		1		- 1	- 1	
						İ			l		! 	
	10.4	90.7		20.1	1.0	04.6	00.0	ار		22.0		
December 3 to 7 inclusive	ı,	, ,	! !		t t	1	1 1	- 1			- 1	
1		1 (0·4 35·0 3 5·8 28·2		- 1	ì	1 1	- 1		ì	1	-
1		1 1	$2.9 \begin{vmatrix} 26.4 \end{vmatrix}$	1 .			1 1					
			9.4 28.1									
98 Jon 2 1874		1 1	1 1)	i	1 1	i	- 1		i	
,, 28 ,, Jan. 2 ,, 1874	27 0 10 1			20 (20	10	101 9	20 4	20 812	9 2	7 3 2 	2.9	45·5
							 		j			
5—181		<u> </u>	$\frac{1}{275}$		i		<u> </u>			- †	_ 1	

Table XXIV.—Means of Daily Temperatures at the Stations in Tables VIII to XXIII, collected in Five-day periods, from September, 1873, to December, 1874, inclusive.

		_				Spence's Bridge.	Winnipeg.	Little Current.	Gravenhurst	Woodstock.	Fitzroy Harbor.	Huntingdon	Quebec.	Halifax.	Sydney.	Truro.	Charlotte- town.	St. John.	Fredericton	Harbor Grace.
January	3	to	7	inclusiv	7e	24·7	° 1·8	28·0	30·1	34·4	。 28·4	35·5	9 27·6	。 37·2	。 34·4	36·4	33·4	34·9	22·5	ი 32·1
••	8	,,	12	,,		28:3	-4.0	19·9	21.8	26.1	26.3	28.5	26.3	38·1	37 · 2	28.3	29.3	26 3	34.1	37.8
••	13	,,	17	"		5.9	-10.3	7.5	5.2	12.1	7.2	9.2	5.2	18 3	19.6	15.0	14.4	12.6	8.9	27 · 3
**	18	**	22	,,	••	-0.8	-8.0	23.7	25 9	30.1	24.4	24.1	17.9	26.9	24.1	24.8	23.8	27.4	23.4	23.8
	2 3	,,	27	, 2)	••	20.6	-12.7	10.8	12.5	22.7	7.5	8.1	2.2	17.8	17.6	15.0	11.8	18.7	9.2	24 · 4
**	2 8	**	Feb	.1st ,,	••	28 ·6	-9.7	-1.0	0.7	14.8	-4·3	-3.2	-3.0	16.7	13.9	12.4	10.1	8.3	2.6	21.5
										1		١					i		1	
Februar	y 2	t	o 6	inclusiv	٧ ٠. .	29.6	6.0	7.8	4.0	16-3	2.0	3.1	0.7	8.3	7.3	7.3	4.6	7.1	1.4	13.9
,,	_		, 11			28.1	1	1	i	1	1	1	i	1	!	ł	1	1	t	28.7
"	12		, 16			20 · 1	3.8	24 - 8	25.7	30.1	27 . 8	28.8	22.0	28.3	26.3	26-2	25.3	27 ⋅ €	25.0	29.5
,,	17	,	, 21	٠,,		32.8	1.0	17:2	19·E	26.5	18.1	20 2	17 · 1	29.0	28·1	27:3	25 4	27 - 6	24.3	30·3
**	22	2,	, 26	3 ,,		23.8	-7:6	7.6	16.7	23.5	17:	20.5	13.8	22.8	17.8	17, 3	15.3	21.8	16.3	19.6
••	27	΄,	, м	ar,3,,		29 · 9	4.8	25 4	30-1	34 · 4	29 - 8	32 - 2	22.5	22.9	11.6	18,2	16.7	25.2	23.4	14.5
								1		}	1		}			}				İ
March		to	8	nclusiv	4 0	91.9	3.1	19.4	193.7	97.0	94.9	296.7	200.4	32.1	22.0	32. 9	90.5	20.1	99.2	37 - 2
	9		13			20.0	i	1		1	1	į.	T .	ı	Į.	1	1	1	1))),34 · 8
,,	14	,,	18	,,		1	28)	1	1	1	1	1	ļ	1	Į	1	1	!	1
**	19		23	"		42.2	I	1	i	ſ	1	!	1	ł	1	1	1	ì	1	9 31 . 0
,,	24	"	28	,,		39.8	ı	ŧ	1	t	t	1	1	1	1	1	1	1	1	3 23 1
,,	29	"		ril2 ,,		1	13:	1	1		1	1	1	i	1	1	1	1	!	l l
**		,,	-	• •											1	1		-		`
	_																			
April		to	7	inclusi		١	į.	1	ŧ	ı	1	1	1	1	1	1	1	1)	1
"	8	,,	12	"	-	50 .	1	1	1	1	1	}		1		1	1	ı	•	6 30 1
"	13	,,	17	,,			24		1	1	1	1		1		1	1	l		
,,	18	,.	22	"		Į.	22		1	1	!	i	1	1	1	1	1	1.	i	1
+9				0		1	6 32·	1			1			F	1	1	1	,	j	1
"	28	,,	M	ay 2 ,,	•	. 101	7 49	0 35	0.58.	44	0 36.	1 33.	g133.,	139.	. 40	38.	7 37	7 37 ·	9 37	2 39∵
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			_				1				1	١	Ì		Ì	1				

Table XXIV.—Means of Daily Temperatures at the Stations in Tables VIII to XXIII collected in Five-day periods, from September, 1873, to December, 1874, inclusive.

		Spence's Bridge.	Winnipeg	Little Current.	Graven- hurst.	Woodstock.	Fitzroy Harbor.	Huntingdor	Quebec.	Halifax.	Sydney.	Truro.	Charlotte- town.	St. John.	Fredericton	Harbor
ay 3 to 7 inclusive	· • • • • • • • • • • • • • • • • • • •	57·2	51·9	。 41·7	0 40·9	6 44·0	o 45·3	。 43·5	40.3	44.3	9 37·7	41.7	39.9	42.4	。 42·2	35
8 ,, 12 ,,	••••••	54.5	51.9	50.7	59 · 2	62.5	53.7	48.4	41.5	45.6	40·2	42.8	42.6	43.9	45.1	38
13 ,, 17 ,,	•••••	59.9	47:0	45 · 2	52.0	54.8	57 · 7	57.4	50·1	53.1	48.0	49.5	40.9	47-4	54.1	40.
18 ,, 22 ,,	,	65.0	53.5	48.5	48.5	48.9	53·1	49.4	47.6	50 · 2	50.6	54.8	52 · 2	47 6	52.4	49
23 ,, 27 ,,	•••	59.5	60 · 4	51.6	55 . 7	57 4	60.0	57.5	50 5	51 · 0	48.5	52.0	51.6	48 ·8	54.3	49
28 "June 2,,		62.5	56.5	61.6	64 · 1	65 · 7	66.7	62·4	52.4	52.7	45.3	52.0	48.5	50 · 1	56.0	42
une 3 to 7 inclusiv	0 ••• ••	61.0	57 · 8	57-8	64.8	67 · 6	67 - 4	65 · 3	60.0	62.7	54.4	59.8	57 . 2	54.5	60-6	49.
8 ,, 12 ,,		63.8	54.6	53 · 4	53.1	59.8	63 · 2	59.9	5 0 ·0	51.0	47 . 9	50.6	47.0	49.9	52.9	45
13 ,, 17 ,,	•••••	65.2	68.1	56 5	58.8	57 . 9	64 . 5	61.9	58.2	55.7	48.4	54.8	53.6	54.7	59.5	45
18 ,, 22 ,,	*** *****	61 . 2	70.0	66 · 1	68 2	67 - 3	68.3	62.2	57 . 8	53.0	46.6	55 1	51.7	53.5	54.7	45
23 ,, 27 ,,		60.7	68:3	63 . 7	62 . 5	69 · 7	66.8	62.5	64 . 2	57 · 1	53.1	53 4	54 .0	54.9	61 2	54
28 ,, July 2 ,,	•••••	64 · 3	62.0	62 · 3	64 · 4	66 · 7	71.5	59.0	59.3	55.3	50.7	55.2	53.6	56 3	57 · 8	48
uly 3 to 7 inclusiv	e	65.1	 70-8	67 : 3	65 2	70 · 4	69 · 2	65.8	62.0	53.7	51.4	55.4	55 1	54 6	58.5	49
8 ,, 12 ,,				1	1	1	i	1	1	l .			1	1	1	1
13 ,, 17 ,,	•••••	. 69 - 3	65.7	66 .0	66.3	66.7	70.9	69 . 6	67.9	66.1	66.9	66.5	67 · 6	60 · 1	71.6	65
18 ,, 22 ,,	•••••	. 74.0	67 - 1	66 . 8	67:4	67.6	71.4	68.0	68.3	63 · 2	62.0	63 · 1	64 4	59 3	66.0	63
23 ,, 27 ,,	••••	. 68.0	64.0	67 - 8	71.0	69.5	74.8	72.1	71.4	63 4	64.6	63 · 4	67.6	60.0	67 · 2	63
28 ,, Aug. 2 ,,	•• ••••	. 65 -4	63.6	64 · 9	62.4	65.0	67 · 8	63 · 4	62.5	66.0	66.4	66.8	67 - 2	61.0	64.9	67
Luguat 3 to 7 inclusi	ve	. 6E.	66 :	 65 (63.1	63 · 2	-66-0	61.4	60.3	60·0	59.9	60.3	60.3	58.3	60.5	61
8 ,, 12 ,,		ì	,		1		i	ı		•	1	ł		1	1	ı
13 ,, 17 ,,	•••••	63.4	61 (65 (67 - 3	67 - 8	67 . 9	64 · 7	64 . 6	62.1	60.3	6 0 · 0	60.8	57.5	61 . 0	57
18 ,, 22 ,,		1		.i			1	1	í	1					60 · 4	
23 ,, 27 ,,		72 8	65.	61 .	57.6	61.5	62.1	58 2	59.9	57.8	54 4	54 . 8	57.6	57.3	56 2	57
28 ,, Sep. 2 ,,	••••••	. 61	61	64	64 6	64 · 4	67 · 1	63 · 3	63.6	60.5	62·1	63 · 7	63 - 8	58.7	60.0	59

TABLE XXIV.—Means of Daily Temperatures at the Stations in Tables VIII to XXIII, collected in Five-day periods, from September, 1873, to December, 1874. inclusive.

Fiv	e-day periods		Spence's Bridge.	Winnipeg.	Little Current.	Graven- burst.	Woodstock.	Fitzroy Harbor.	Huntingdon	Quebec.	Halifax.	Sydney.	Truro.	Charlotte- town.	St. John.	Fredericton.	Harbor
	بستند بيسيه والبطائي		<u> </u>	B	_		MC .		Hu	<u> </u>	H .	σά 		 	ž	Fre	
Beptember 3	to 7 inclusiv	re	64.3	63.3	1	i	1	•	í	•			59.8	60.9	56.9	57 · 9	56
,, 8	,, 12 ,,	•••••	56.5	62.7	71 · 1	69.1	72.9	67:9	62.2	60.6	56.6	52.4	52.6	54.3	58.6	57·6	52
,, 13	,, 17 ,,		i i		ì	1			1	60.2	1 1	i 1	i i	1		t	!
	,, 22 ,,	•••••	1		1	ì	•			54.0)	l i	1	ì]	į.	1
,, 23	,, 27 ,,				Ì	İ			1	56.6	1			ł	1	i	1
,, 28	" Oct. 2 "	•••••	58.4	46.6	49.5	47.9	49 8	53·9	51.9	50.6	59.9	56 ·5	61.5	59.2	56.3	55.7	58
October 3 to	7 inclusive	• • • • • •	53·4	49.7	46·8	45.3	46.5	46.8	45.3	46.8	49.5	50.8	46.9	50 ·8	49·1	48.8	50
,, 8,,		•••••	l i		1	i	, ,			1	1 1		1			1	i
,, 13 ,,		,	53.7	46.0	44.5	38.0	41.5	45.5	44.7	44.9	48.3	41.8	47 · 8	49.7	49.1	45.6	49
,, 1 8 ,,	22 ,,		47.1	45·1	41 · 9	36.9	43.7	38.9	40.2	40.6	46.8	48 2	40.0	45 ·8	46.3	43·8	51
,, 23 ,,	27 ,,	• • • • • •	39.0	44.4	50.5	49.8	53.9	50.3	50.6	46.9	42.9	45.3	45 • 4	47 · 4	45.3	42.4	45
,, 28 ,,	Nov. 2 .,	•••••	34.6	26.6	36.2	37.5	41 1	40.2	42.1	38.0	45.8	45.5	43.6	45.2	47.6	44.7	45
															,	}	
November 3	to 7 inclusiv	e	38.6	31.7	49•4	44.0	47.0	44.9	44.1	40.7	43.0	42.7	40.5	44 ·3	44.7	42.5	42
,, 8	,, 12 ,,		30.5	2 5·2	37 · 9	37.9	41 · 9	39.0	38.7	35.8	4 0 · 2	39.9	37 · 4	39·1	40.1	37.8	41
,, 13	,, 17 ,,		24.1	5.4	33.0	29.9	31.7	29.5	29.8	25.5	31.3	33.0	30.1	30.6	30.6	29.1	33.
., 18	,, 22 ,,	• , • . • .	15.3	9.7	24.5	24.3	23.2	21.4	23.6	21.0	31.3	31 · 4	27.2	27.2	27 1	27.5	29
23	,, 27 ,,	•••	11.1	-7:5	22.0	2 6·6	29.9	23.9	27.3	21.0	34.1	35.0	32.6	32.0	30.4	24.1	35
, 28	" Dec. 2 "		31.0	2.0	19.5	20.5	22.6	17:6	21.2	17.0	36.0	35.9	33.8	32.3	32.3	22.0	38
			•														
December 3	to 7 inclusiv	е	35·3	20,4	22·3	22.6	29.3	18.6	25·3	21.9	36.1	37:2	33.2	$32 \cdot 2$	33 · 2	28.6	36.
,, 8	,, 12 ,,	••••	36.7	2.1	17:0	1 5·1	2 3+4	6.5	16.7	11.2	29 · 8	33.7	26.7	24.5	24.7	16.1	39 ·
,, 13	,, 17 ,,		35.4	6.5	13.2	11.1	19.7	3.6	3.4	1.6	18.9	28.1	15.3	15.2	8.4	3.6	31.
., 18	,, 22 ,,	•••••	28.1	8.9	27 8	21 5	26.9	11.9	12.2	8.6	$21 \cdot 9$	23 · 5	18 3	17.8	16.5	7.9	27
,, 23	,, 27 ,,	• • • • • •	26.0	-1 · 8	26.8	26.7	27.5	20.9	20.7	19.7	29.8	28.5	25.5	23.9	28.7	24 · 3	29
,, 2 8	,, 31 ,,	•••••	30.8	$\overline{19}.5$	6.0	6.4	20 8	3.1	11.4	6.4	15.2	19-1	15.3	8.7	15.2	11.7	15
												. }	- 1				

Table XXV.—Percentage of Cloud in each month, and in the year, at cortain Stations in the Dominion of Canada, from September, 1873, to December, 1871, and sive.

			1873					7 have 1				1874.				100		
	September.	October,	November.	December.	Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December,	Year.
ONTABIO.										-								}
W. & S. W. District.	}			ļ	i	Ì	ļ		l	j 							}	
Windsor	52	59	68	77	65	81	76	62	59	49	59	55	38	51	60_	65	71	61
Granton	45	62	78	82	•	80	76	66	52	39	44	41	22	35	56	72	82	55
Simcoe	26	3 9	57	81	49	83	58	21	36	28	22	28	20	35	54	56	76	43
Woodstock	58	63	82	82	62	81	72	64	54	47	49	47	32	38	52	63	79	56
Hamilton	39	56	65	. 74	57	78	72	64	54	46	48	41	30	37	56	62	75	55
Mean of District	44	56	70	79	58	81	71	55	51	42	44	42	28	39	56	64	77	54
N.& N.W. District	65	64	7.0	76	58	65	-		97	F0	60	1 45	-	48	0-	20	74	
Little Current	60		76	83	62	88	57	54	37	56	63	47	34	1	65	69	74	56
Peint Clark		67	89				81	76	46	49	46	45	46	56	71	77	90	58
Stratford	50	57	75	80	61	78	69	67	54	39	50	42	33	39	61	71	84	57
Kincardine	58	63	89	82	57						٠	•	٠			•	٠	٠
Goderich	53	67	84	80	l Ox	84	75	71	36	38	49	47	36	41	60	73	85	58
Gravenhurst	59	64	74	69	56	60	48	46	34	43	53	41	32	41	67	66	74	50
Barrie	61	61	77	81	62	78	78	68	52	42	52	44	28	44	67	69	80	58
N. Gwillimbury.	58	68	87	85	58	79	71	71	43	42	50	54	31	42	70	78	84	60
Mean of District	58	64	81	79	60	76	78	65	43	44	52	46	34	44	66	72	82	57
Toronto*	46	61	77	81	60	78	74	68	63	50	54	52	39	49	76	72	78	63
E. & N.E. District.	57	61	84	81	65	75	63	78	69	59	71	61	54	63	71	77	72	68
j				80	59	69	59	58										
Peterborough	49	57	69	81	54	71	61		56 54	45 47	57	47	36	46	61	57	71	55
Belleville	45	49	70					61			44	37	36	40	59	60	68	53
Fitzroy Harbor	53	61.	75	68	54	68	52	58	48	49	56	43	55	61	64	78	68	58
Pembroke					•			60	50	48	60		_	63	70	70		•
Ottawa	66	68	85	75	67	<u> </u>		<u> </u>								<u></u>		<u>.</u>
Mean of District	54	59	77	77	60	71	59	63	55	50	58	47	45	55	63	68	70	59
Mean for Out	50	60	76	79	59	76	71	73	53	46	52	47	37	47	65	69	77	59
QUEBEC. Huntingdon	47	53	65	62	48	62	45	56	51	48	52	48	30	41	55	60	62	51
Quebec	51	62	68	73	58	77	47	60	45	55	52	55		45	57	75	62	
															- 1	, ,		non na

^{*}Toronto has been assumed to represent the ceneral district of Ontario.

Table XXV.—Percentage of Cloud in each month, &c.—Continued.

and the second second		707 10 40 10 10 10 10 10 10 10 10 10 10 10 10 10																
			18.73,									1874.						
	September.	Oetober.	November.	December.	Year.	Janusry.	February.	March.	April	May.	June,	July.	August.	September.	October.	November.	December.	Year.
Nova Scotia.													_	_		_		
Halifax	57	53	58	63	58	70	55	54	61	60	73	57	65	55	49	58	58	59
Glace Bay	63	66	71	75		72	6 8	65		62								
Sydney	58	59	74	74	58	71	60	63	64	54	76	52	66	59	47	68	76	63
Guysborough	56	59	66	71	60	72	63	62	71	55	83	55	67	63	51	64	72	65
Wolfville	59	56	72	64		76	62	61	51	57				53	48	73	86	
Digby	42	43	69	65	51	71	57	54	54	37	58	44	40	44	34	63	77	53
True	66	67	74	71	65	81	60	64	69	61	86	67	63	69	58	73	76	69
Windsor	47	53	61	58		64	47	49	47	27	57	3 3	35	44	31	35	55	44
., King's Coll.		60	72	71	·	80	60	57	67	56	0.	57	-		31			
	156	57	69	68	 58	73	59	59	61	52	72	52	56	55		62		60
NEW REUNSWICE.												-52	100		45		71.	
St. John	59	59	63	58	60	67	50	50	62	57	75	66	64	60	52	59	62	60
Data Direv	50	55	62	54.	53	68	43	46	51	51	67	48	53	54	47	58	57	54
Wredericton	48	61	62	51.	54	61	41	46	50	50	70	62	54	61	52	62	56	53
Ballanes	1	49	67	46	48	58	39	41	52	44	67	47	35	44	44	56	53	48
Da honsie	68	53				55	47	45	5 3		66		37	55	57	75	70	
Mean for N.B.	 55	53	63		54	62	44	46	54	50	67	56	49	55	50	62	60	54
I. B. Islaud.																_		
The defetowa	61	61	79	76	62	78	59	58	63	56	74	56	54	57	49	73	70	62
Gereje Town					·		48	48	5 4	41	63	44	41	46	30	63	66	•
Manugsa.	/:A	*0	61	45	49	53	47	36	31	42	46	36	42	32	29	51	50	41
Fort Garry		50																
Winnipeg	-52 	-09	63	46	5 2	62	55 ——	37	37	42	46	32	47	34	28	55 ——	53	44
Spence's Bridge	45	28	56	43	46	64	48	39	47	54	57	39	49	42	31	53	60	49
Ergalmoult	20	39	69	36		<u>.</u> ε 2	75	79	50	56	49	27	58	79	79	78	82	66
Wenykogridland.																		
St. Johns	63	68	73	70	65	65	51	69	66	65	76	67	61	64	61	80	78	67
Harber Grace	70	6 3	69	64	66	71	61	71	65	67	75	65	69	62	62	75	77	68
Fego	63	57		89		73	63	6 6	62	70	68	52	43	65	64	69	76	65
Chamel							70	71	71	66	73	49	64	58		85	84	•
Moon for Nowloandland	65	63	71	74	66	71	61	€9	66	67	73	58	59	62	62	77	80	67
gradien gewannen gewannen werden der eine der einem der	-					·			·			-	1				!	

Table XXVI.—Rainfall in inches, in each month and in the year, at the several Stations in the Dominion of Canada, from September 1873, to December 1874, inclusive, the Stations in Ontario being divided into districts.

				1873		-						1	874.						
	—	September.	October.	November.	December.	Year, 1873.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year, 1874.
	ONTARIO.																		
	Windsor	2.25	2.01	0.72	35.1	24 ·06	2.46	1.07	0.29	1.24	1.16	4.12	3.35	1.49	0.93	0.56	1.15	1.56	19.68
; ;	London	3.51	3.40	0.67	2.97				2 ·85	0.30			٠			.			
strik	PortStanley			1 6			2.96	2.02	1.26	1.81	2.06	2.15	4.04	3·4 0	2.09	2.36	1.02	0.49	25 · 66
at D	Granton	2 ·63	3.51	0.63	3 07	28 ·13	3.55	1.45	1.38	1.17	1.37	2.66	1.29	1.04	3.00	0.85	0.82	0.11	18.69
- We	Woodstock.	3 · 24	3.73	0.21	2.74	28 94	3.07	1.84	1.85	1.39	1.93	2.42	3.35	0.99	1.61	1.08	1.02	1.24	21 · 79
outh	Ingersoll	2·4 9	3.91	0.70	2.70	29.08	3.29	2.13	1.46	0.97	1.73	2 ·85	2 ·32	0.44	2.86	2.00	0.78	0.33	21 · 16
West and South-West District.	Simcoe	2.07	2.98	0.80	2.27	29 · 47	3.08	0.11	0.45	1.27	2 ·43	0.89	3.15	3·3 5	1.55	1.29	1.19	0.68	19.44
ezta	Port Dover.		,				2.69	1.61	0.77	0.87	2.19	0.99	2 ·53	2.44	0.98	1.37	1.29	0.31	18.04
2	Duvdas	2 ·87	2.44	R	2.50		2.05	R			·								
	Hamilton	2 ·67	3.80	4.60	3.04	34 ·35	4 · 97	2.13	1.60	2.59	0.78	3.57	2.41	0.47	2.53	1.83	2.33	1.90	26·7 7
1	Mean of Dist.	2 ·72	3.22	1.05	2.81	29.01	3 12	1.37	1.36	1.36	1.71	2.46	2.93	1.70	1.91	1.42	1.19	0 83	21 3
	Lit'leCur'nt	3.63	4·12	0.26	0.94	23.65	0·2 0	0.20	0.43	0.30	2.54	4.19	1.96	1.04	3.59	3.43	1.12	0.25	19.55
	Saugeen						1.49	0.44	$2 \cdot 22$	0.84	2.06	1.97	2.59	0.67	1.95	2.87	2.04	0.74	19.88
	Point Clark	1.08	4.56	2.21	2.63	42.32	4 · 17	2·28	1.38	1.25	2.89	3.32	2.93	1.49	3.29	4.23	2.85	1.70	32 · 14
trice	Stratford	2.61	2.59	0.59	2.99	28 ·38	2.65	1 · 27	1.92	1 · 22	2.30	3.48	3.06	0.74	2.59	1.29	1 · 19	0.20	21 · 91
North and North-West District	Kincardine.	6.45	4.09	1.80	2.45	34 · 48	3.00	0.85	1.35	0.58	1.89	1.89	1.81	0.42	3.30	2.95	0.70	0.47	19 · 21
West	Goderich	4.34	4.61	0.06	0.89	20:34	1.39	0.60	1.82	0.61	2.39	2.84	1.06	1.21	2.84	2.13	2.23	\mathbf{R}	19 · 12
rth-	ParrySound							.								3.33	1.31	0.23	
l No	Orillia	4.74	4.12	R	R	16.94	R	R	R		1.80	3.15	3.92	0.00	2.88	4.61	0 · 34	\mathbf{R}	
t and	Stayner	4.59	2 · 87	0.07	0.77		0 · 97	0.30	0.91	0.20	1.51	1.58	2.48	1.14	1.92	2.78	0.10	0.(-)	14 · 19
Vort	Grav'nhurst	6∙1€	4.72	0.72	0.55	29.13	1.07	0.27	1.03	1.12	2.51	3.30	3.50	0.86	3.25	5.50	1 · 53	0140	24 · 04
7		3.24	3.07	R	1.09	17:24	0.55	1.20	1:15	0.51	1:38	2.10	1.91	1.47	1.80	1.42	0 - 33	16	$^{1}_{13}$ 72
	N. Gwillim- bury	3 54	1.66	0.40	0.98	19:12	1 05	0.80	0.86	0.54	0.98	2.70	1.24	0.70	1.04	1.44	0 · 38	0.69	11.73
	Georgina	3·1 6	2.70	0.46	1.07	20 16	1 00	0.65	0.83	0.47	9.97	2.98	2.00	0.93	1.91	1.69	0.30	0.20	13.93
3	Mean of Dist.	4.77	3.56	0.60	1.30	25 18	1:46	0.76	1.17	0.72	1.93	2.79	2:45	0:94	2.56	2·83	1:14	0.53	19:12
. 36	Brampton	3.05	3.00	0.30	1.75	22.55	1.50	0.50	1.65	0.90	1.40	0.90	$\overline{2\cdot75}$	0.40	2.25	1:30	0.60	0.50	14 35
Di.	Toronto	3.02	2.16	0.51	1.00	20.23	2 82	1.15	1.39	1.24	1.49	1.79	3.35	0.38	1.55	1.42	0.94	0.05	17:57
Central Dist.	Welland Port; Dalhousie	1.92	2.84	1.19	2·63	 25+65 	3.71	1.87	0.33	1 36	2.47	1.78	3.61	0·34		2·01 1·17		ì	21 43
3	Mean of Dist.	2:66	2.67	0.67	1 79	22:81	2.63	1.17	1 12	1.17	1.79	1 : 49	3.24	0:37					17 58

1873. 1874		Тав	LE J	XX	VI	-Ra	infall	in e	each	moı	ıth i	n th	e ye	ar	-(C	ontir	rued	.)		
ONTABIO. Cornwall 3:69 4:50 0:88 1:03 24:04 1:88 0:54 1:59 1:01 2:90 2:45 4:39 2:29 1:99 1:31 0:55 0:12 21:65 percent berough. Peter berough. 2:83 3:18 0:30 1:82 19:28 1:50 1:00 0:94 0:95 1:03 2:33 5:27 1:15; 2:05 2:05 0:83 0:02 19:18 N. Douro 2:03 0:42 S. Belleville 2:18 4:15 0:75 1:52 21:34 1:94 1:89 1:79 1:55 2:10 2:61 2:97 1:52 2:93 3:19 1:13 0:25 0:23 23:88 (Kingston 2:71 1:89 2:49 0:90 1:83 2:35 3:07 1:13 1:93 2:99 1:65 0:28 23:29 Harbor 3:54 3:68 0:68 0:66 21:60 2:27 0:44 0:46 0:57 1:11 1:66 1:30 0:49 1:75 2:48 0:33 Erabeck Ottawa 3:36 3:96 0:45 1:74 21:44 1:95 1:53 1:10 0:63 1:50 1:75 1:04 1:09 2:03 2:38 0:15 0:30 1:55 2:18 2:27 1:065 0:28 1:95 2:19 0:28 2:29 1:05 2:16 2:10 0:92 0:39 1:94 0:40 0:69 1:49 2:91 3:89 4:49 3:89 4					187	3.								1874						
Cornwall 3:69 4:50 0:88 1:03 24:041:88 0:54 1:59 1:01 2:90 2:45 4:39 2:29 1:99 1:31 0:55 0:12 21:6 Peterborough 2:83 3:18 0:39 1:82 19:28 1:50 1:00 0:94 0:95 1:03 2:33 5:27 1:15 2:05 2:05 0:83 0:02 19:1 N. Douro		Name of States	September.	October.	November.	December.	Year, 1873.	January.	February.	March.	April	May.	June.	July.	August.	September.	October.	November.	December.	Year, 1874.
Borough 2-83 3 18 0 39 1 82 19 28 1 50 1 00 0 0 94 0 95 1 03 2 33 5 27 1 15 2 05 2 05 0 68 3 0 02 19 1		Cornwall	3.69	4.50	0.88	1.03	24 · 04	1.88	0.54	1.59	1.01	2.90	 2·45	4.39	2.29	1.99	1.31	0.55	0.12	21.64
Ringston	rict.	Peter- borough	2.83	3.18	0.39	1.82	19 28	1.50	1.00	0.94	0.95	1.03	2.33	5.27	1·15	2.05	2.05	0.83	0.02	19.12
Ringston	Dist	N. Douro					<u> </u>									2.03		0.42	s	
Ringston	'a8t	Belleville	2·18	4.15	0· 7 5	1.52	21 · 34	1.94	1.89	1.79	1.55	2.10	2.61	2.97	1.52	2.93	3.19	1.13	0.53	23.85
Fitzroy Harbor. 3 : 54 : 68 : 0 : 0 : 68 : 0 : 6		Kingston					Ì .	2.71	1.89	2.49	0.90	1.83	2.35	3.07	1·1 3	1.93	2.99	1.65	0.28	23.22
Pembroke	st a)	Brockville	2 ·31	5.64	0.59	1.37	26.77	2 ·89	 1·74	2.03	1.06	1.94	1.36	3·27	0.28	1.38	2.79	0·79	0.88	20.71
Ottawa	h Ea	Fitzroy Harbor	3.54	3.68	0.68	0.66	21 60	2.27	0.44	0.46	0.57	1.11	1.66	1.39	0.49	1.75	2.48	0.33		
Ottawa	Nort	Pembroke			ł •					0.44	0.69	1.49	2.91			3.89	4.49			
Mean for Ont. QUEBEC. 3·28 3·41 0·74 1·69 24·85 2·36 1·15 1·25 1·04 1·74 2·23 2·92 1·05 2·16 2·19 0·92 0·39 19·4 QUEBEC. Montreal. 2.94 1·01 1·13 1·44 3·53 3·82 5·99 1·55 3·07 1·56 1·03 0·06 27·1 Quebec Ob'y. 3·42 6·35 0·79 R 28·17 R R R 1·27 0·00 6·53 4·09 5·83 1·78 1·08 2·96 0·54 0·36 24·4 Quebec Citadel. 2.95 7·32 2·25 1·72 1·75 0·41 0·00 . Father Point. R 0·10 0·61 0·50 0·90 1·70 1·12 0·84 0·79 . R 1·27 0·00 6·53 4·09 5·83 1·78 1·08 2·96 0·54 0·36 24·4 0·40 0·62 18·06 0·70 0·20 R R 1·23 4·88 9·78 5·19 4·95 3·43 2·53 1·60 34·4 0·40 0·62 18·06 0·70 0·20 R R 1·23 4·88 9·78 5·19 4·95 3·43 2·53 1·60 34·4 0·40 0·62 18·06 0·70 0·20 R R 1·23 4·88 9·78 5·19 4·95 3·43 2·53 1·60 34·4 0·40 0·40 0·62 18·06 0·70 0·20 R R 1·23 4·88 9·78 5·19 4·95 3·43 2·53 1·60 34·4 0·40 0·40 0·40 0·40 0·40 0·40 0·4	- 4	Ottawa	3.36	3.96	0.45	1.74	21 44	1.95	1.53	1.11	0.63	1.59	1.75	1.04	1.09	2.03	2.38	0.15	0.30	15.55
Montreal	Ŋ	lean of Dist.	2.99	4.18	0.62	1.36	22.41	2.16	1.29	1.36	0.92	1 55	$\frac{1}{2 \cdot 18}$	3.06	1.18	2.22	2.71	0.65	0.23	19.51
Montreal	N	Lean for Ont.	3.28	3.41	0.74	1.69	24·85	2.36	1.15	1.75	1.04	1.74	$2 \cdot 23$	2.92	1.05	2.16	2.19	0.92	0.39	19.40
Quebec Citadel	Mo	QUEBEC.			-	 .		2.94	1.01	1.13	1.44	3·53	3.82	5.99	1.55	3.07	1.56	1.03	0.06	27.13
Father Point	Qu	ebec Ob'y	3.42	6.35	0.79	R	28.17	R	R	1.27	0.00	6 ·53	4.09	5 · 83	1.78	1.08	2.96	0.54	0· 3 6	24 · 44
Huntingdon	Qu	ebec Citadel.							١.				2 59	7:32	2·25	1.72	1·75	0.41	0.00	
Danville	Fat	her Point						\mathbf{R}	0.10	0.61	0.50	0.90	1.70	1.12	0.84	0.79	! .	١. '		.
Carleton 4 '72 4 '54 1 '75 7 '36 1 '29 3 '09	Hu	rtingdon	2.76	6 63	1.11	1.16	25.22	3.44	1.60	2.64	1.09	5 49	2.59	4.82	2.26	3.22	3.14	1.72	0.30	32.31
Cape Rozier	Da	nville	2.09	4 44	0.44	0.62	18:06	0.70	0.20	R	R	1.23	4.88	9.78	5· 1 9	4.95	3.43	2·53	1.60	34:49
Charlesbourg 4 · 24 8 · 50 0 · 77	Car	leton	4.72	4.54				l } .	} } .] }• •		1.75	7:36			$ 1 \cdot 29 $	3.09		١.	١.
Lotbiniere	Cap	e Rozier						0.89	0.27	3.66	0.99	3.01	5.71	3·17	2.66	1.40	2.68	1.61	R	26.05
Point aux Trembles 3·66 9·86	Cha	rlesbourg	4.24	8:50	0.77					١.								١. '	١.	١.
Trembles 3 · 66 9 · 86			,		 .							1.16	3 · 39	4.48	1.31	 2·76	1.83	¦ .4∙00	١.	
Levis			3.66	9.86								2.10	7.78	 7 · 36	1.27	2.00	2.35	.	! ! .	
N. Brunswick. St. John. 448 645 238 134 37 08 247 227 327 134 277 617 282 406 226 086 380 211 342 Bass River. 323 435 109 006 2359 155 064 141 040 322 326 160 550 162 125 180 046 227 Chatham	Lev	/is	2.45	9:20								,	,			١.	١.			
St. John			3.33	7 · 07	0.78	0.20	23.82	1.33	0.53	1.55	0.67	2.96	4:39	5.54	2.12	2.23	2.53	1.69	0.39	25.93
Bass River 3 23 4 35 1 09 0 06 23 59 1 55 0 64 1 41 0 40 3 22 3 26 1 60 5 50 1 62 1 25 1 80 0 46 22 7 Chatham 1 28 0 30 2 54 0 56 4 91 6 92 4 13 3 44 1 99 2 52 1 09 0 25 29 9 Fredericton 3 66 4 63 3 99 0 23 29 46 2 99 1 30 2 83 2 22 2 99 4 44 1 82 5 51 2 05 2 16 3 24 0 54 32 0			4.48	${6.45}$	2.38	$\frac{-}{1 \cdot 34}$	37.08	2.47	$2 \cdot 27$	3 · 27	1.34	2.77	6.17	2.82	4.06	2.26	0 86	3.80	2.11	34.20
Chatham						J		!	i	i	1			1	,			•	ı	1
Fredericton 3.66 4.63 3.99 0.23 29.46 2.99 1.30 2.83 2.22 2.99 4.44 1.82 5.51 2.05 2.16 3.24 0.54 32.0		ł								ì	1		٠ .	ł	i	!	i	1	l	1
	Fre	dericton	3.66	4.63	3.99	0.23	i	1	!	i	i	i		i	į .	1	t	Į.	l .	ł
				1)		ì		ļ	i	ı	1	ł	Į.	i	1	1	J	Í	i
Dorchester 3.65 5.49 5.65 0.78 38.22 2.06 2.27 1.34 0.62 2.55 6.17 2.33 2.80 3.03 2.16 2.16 0.82 28.3					1		(l	:	į .	i	ţ		!	1	}	1	1	j	1
Dalhousie 2:96 3:25				1	1			l	i	ł	į.	ł			1	ı	į		ı	i
Mean for N.B 3 39 4 51 2 85 0 48 29 14 1 49 0 98 2 25 1 02 2 79 5 61 2 46 3 66 1 90 1 83 2 19 0 63 26 6						0.48		!						ļ		!	1	1	'	

TABLE XXVI.—Rainfall in each Month and in the Year.—Continued.

	1			ST 253		Ī				*==								
		 .	187	3.		_						187	4.					
	September.	October.	November.	December.	Year, 1873.	Japuary.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year, 1874.
NOVA SCOTIA.																		
	4.48	8.63	7:40	2.21	45 27	3.81	2.28	3.63	1.90	4.76	7 - 92	 2 2·29	3:37	5.04	2.46	3.37	4 . 42	45.25
Truro	4.55	8.09	3.73	0.85	35.27	2.35	0.88	2.49	0.82	3.43	3.02	3.94	2.39	4.02	2.97	2.63	3 · 93	 32·87
Seaforth	4.29	9.29	5.73	1.58	42.56	٠,						1.						.
Beaver Bank	4.39	6.17	6.51	0.53	36:93	3.12	R	3.06	0.76	3.39	6.50	3.31	3.38	3.91	2.13	4.10	4.51	38.19
Wolfville	2.87	4.69	4.68	0.51		0.79	1.42	1.44	0.48	2.21				2.40	2.13	2.41	2.91	
Guysborough	5.31	7.63	7:00	1.54	50:45	3.28	2.16	3·17	1.57	4.88	5.64	2.53	3.78	7.90	4 11	3.62	4.70	47:34
Sydney	4,62	5.94	6 · 67	0.93	46.69	2.46	1.73	3.08	1.24	6.07	5.98	1.74	1.95	4.36	3.40	2.98	3.60	38.59
Glace Bay	3.11	5.12	6.42	0.85		1.97	1 · 20	2.04	0.62	5.30	6.22	1.87	1.40	3.41	2.88	3.11	2.75	32.77
Cow Bay	3.64	5.08	4 · 21	1.45	,	2 ·63	1.40	3·18	0.43		-	2.00	1.80	3.48	3.46	3:11	3.89	
Port Hastings.	,	.	•			1.05	0.79	3.22	0.82	3.00	5 11	1.48	2.37	8.65	4.00	2.77	2·1 3	35.39
Mean for N.S	4.14	6.74	5.82	1.16	42.75	2:38	1.32	2.81	0.96	4.13	5.77	2.40	2.55	4.80	3.06	3 12	3.65	36.95
P. E. ISLAND.																		
Charlottetown.	4-17	6.98	2.78	0.64	31.73	2.06	1 10	1.71	0.30	3.53	3.38	2.79	1.91	4.47	2 · 50	1 · 89	2.04	27 ·68
George Town		7.70		_		<u>. </u>	0.42	1.93	0.54	4.66	2.82	3.34	2.66	5.45	3 · 08	3 15	3·31	<u>.</u>
Newfoundl'd.								İ	ļ			.		1		.		
St. John's	1.68	2.65	5 · 25	0.49	25.51	3 · 24	0.68	3.72	0.50	4.78	5.21	3.44	11 · 22	3.55	1 · 87	6.16	5 ·6 0	50.27
Harbor Grace.	3.26	3.77	6 · 49	3.03	30·00	2.80	0.55	1.88	0 81	2.55	5.03	3.70	9.13	2 45	2 25	4.16	2 · 88	38·19
F ogo	1 · 98	4 33	2 · 70	.	.	.	R	2.96	0.00¦	1.57	1.69	2.25	1.78	2.56	1 29	2.07	2.05	
Channel	.	. 1	6 · 69	2.17		3.24	1.14	5.87	0.00	5.08	5 · 73	2.76	4.70	4.33	.	1.52	3.50	
Bay St. George.	1.31	.	.	.		11	2·00	3.69	o·52¦	8.39	4.32	2 53	3.83	1.28	3·10¦2	2.48	2 · 65	38.90
	2·8i	3.58	5.28	1. 90	27.70	3.35	87	3 62	9:37	4 47	4.46	2.94	6.13	2.83	2.13	3.28	3.34	37 · 79
MANITOBA.													-		i			
Fort Garry 2	2.22	020	00	0.00	13 58	0.00	0.00	.45 (0.02	1.99	4.35	3.07	3.35	1.73	0.04	0.00	00.00	15.00
Winnipeg 2	3. 0 0 0	23 0	000	0.00	L6·35	0.00	0.00	57	18	1.53	0.54	4 · 45	1.97	2.88	24 0	13	R	12.49
Little Britain	<u>. </u>		·	·		.	.	·	.	1.16	2.47	1 · 88	2.08	2.50	·	<u>. </u>	<u>. </u>	
B. Columbia.									-1			-				-[-		
Spence's Bridge	38 0	21 0	. 57	37	. 0	16 0	38 0	.00	.43	1.26	L·03	0.36	0.61	26 0	190	17 0	04	5·19
Esquimault 0	03 0	66 2	46 2	35	. ја	95 2	49 0	84 0	• 52 (29	redo	0.00	0.73	78 0	33 5	25 2	32	7.80
								0.0										

TABLE XXVII.—Quarterly Rainfall at the several Stations, with the Fall of Snow in each Month, and the Total Precipitation of Rain and Melted Snow, expressed in inches, from September, 1873, to December, 1874, inclusive.

shes.	1874.	June. (I)ctober: November.					. 0.3 13.0	0.0 17.0	3.0 17.4	. s 11.0	6.8	0.2		*	1.0 12.3
Snow in Inches.		JirqA		_	10.2	•	4.5	0.4	8.9	0.1	0.0	8.7	•	0.0	<u> </u>
n of S1		March.			3.0	•	4 2.4	0.9	6.5	0.4	0.0	7 2.3	·	*	<u> .</u>
Depth of		February.			0.		15	0.9 0.	.3 13.4	2 10.0	8.0 10.0	2.6 0.	4.0 6.0	0.9	9.4
		Precipitation,			33.75 21	· -	26.2	.33 31	.6 19.3	<u>ئد</u> -	8 28.	. 13.0	*	*	.54 16.0
		Year.			86.96	-		_귶_	12.5 108.2 39.76		84.0/37	-		•	12.7 105.3 39.54
	1873.	Г)есе шрет.			9.2	0.7		25.0 132.0	12.5 10	9.2	0.11	 -	0.4	8.87	12 · 7
	1	Почетрет.			16.5	14.5	•	0.08	27.5	0.6	14.0	•	11.0	*	12.3
		October.			0.2	4.0	•	10.3	2.8	0.5	16.1	•	82	7 /2	2.1
		Year.			27 19 68	•	25.66	1.78 18.69	21.79	21.16	3.16 19.44	18.04		26.77	31.38
		Autumn.			က်		3.87		3.34	3.11		2.62		5.96	3.44 21
7 20 2	70(¥.	Summer			2 5.77		9.53	5.33	5.95	29.2	20.8	5 5.95		4 5.17	9 6 52
		Spring.			6.25	•	₹ 6.02	5 5.20	6 5.74	8 5.55	4 4.59	7 4 05		6.94	5 5.53
		Vinter.			06 11.12		£2.9	3 6.38	92.9	88.9	7 3.64	20.9		2 8.70	1 5.85
9	1875.	Year,			•			7.21 28.13	6.68 28.94	7.31 29.08	5 29 - 47		··	.44 34.35	8 29.01
	-	,naminA			6.24 24	7.04	··	7.2		7.3	6.15 29	•	4.64	. 11.4	7.08 29
			ONTARIO.	W. and S. W. District.	Windsor	London	Fort Stanley	Granton	Woodstock	Ingersoll	Simooe	Port Dover	Dundas	Hamilton	Mean of District, †

73.0 26.85	73.7 27.25	80.6 40.20	33.33	32.67	69.1 26.03	•		•	41.5 103.0 34.34	21 · 22	16.0 138.5 25.58	93.1 23.24	29.61	67.5 21.10	67.7124.34	44.4 25.87	•	.]	59 1 23 49
			18.2 114.2 33.33	24.0 134.6 32.67		45.5 116.2		17.7 140.7	103.0	•	138.2		21.4 104.9 29.61					.	
19.0	11.9	10.2			17.5					15.0		12.1	1 1	12.5					1.2
0.9	2.8	17.2	28.2	15.4	6.1	0.23	8.2	٠ 8 9	19.5	0.61	0.12	6.2	17.9	16.5	11.7	2.0	12.1		8.11
0.2	002	Ω	1.5		•	203		3.5	2.0	ω	Ω	σΩ	6.0	00	702				702
	•	•	٠			•	•	•	•	٠	•	•							•
2.0	•	•					•			ω	•	•	0.1						•
5.3	11.6	9.9	10.2	8.4	0.0		•	9.9	2.2	2.7	2.2	0.2	9	0.2				.	10.0
7.2	0.0%	9.4	10.5	27.5	2.0	13.7	•	15.3	0.2	*	0.88	9.11	13.6	ę. 10				•	4.0
¥3.	6.2	12.9	11.5	15.6	0.6	10.2		16.0	10.5	*	14.0	14.4	11.9	¥.					16.0
0.98	13.6	24.4	33.5	20.0	2.9%	8.48	•	6.68	0.02	38.3	<u>%</u>	40.1	32.6	6. 7.		5.0		. }	10.2
87.5 32.40	•	10.3 122.4 54.56	20.0 106.4 39.02	8.5 124.9 46.97	13.5 109.5 31.29	16.3119.628.90	•	•	11.0 110 0 40.13	98.5 27.09	23 0 127 1 31 83	14.1 100.6 30.22	14.0 110.6 36.24	81 · K 30 · 70	31.61	46.630.31	; ;	$\cdot \mid$	80-6 30-87
-		122.4	106.4	124.9	109.5	119.6	•	•	0 011	98.2	127.1	9.001	9.011		_	46.6			
0.9	••						•	13.2		18.5				14.0					13.0
18.0	•	46.1	25.2	29.3	34.5	23.2	٠	0.88	15.5	24.0	23.5	12.8	26.4	13.0				•	15.9
2.0	•	1.0	12.7	3.2	9.2	1.2	•	2.3	3.1	2.0	0.1	0.1	3.8	, ,					2.9
4.80 19.55	5.65 19.88	8.84 32.14	2.68 21.91	4.12 19.21	4.36 19.12		•	2.88 14.19	7.13 24.04	1.65 13.72	1.72 11.73	2·19 13·93	4.34 19.12	9.10 14.98	9-41 17-87	2.18.91.43	1		2.59 17.58
-						2.52	5.16											3	
62.	2.21	8.01	6.39	5.23	5.11	7.40		2.24	19.4	5.18	2.98	4 .8	5.92	1				•	5.57
7.03	4.87	7.48	4.00	4.36	5.84	1	•	3.59	6.93	3.99	4.22	4.42	5.44	8				•	4.45
1.13	4.15	7.83	2.84	5.20	3.81	辉	٠	2.18	2.37	2.30	2.81	2.48	3.39	6	60 %	9 5	Te 0	•	4.97
5.32 23.65		42.32	38.38	34.48	20.34	4.12 16.94	٠		5.99 29.13	4.16 17.24	3.04 19.12	4.23 20.16	25.18	8	0.027 00.0	20.20	00 0	•	22.81
~	•	9.40 42.32	6.17 28.38	8.34 34.4	5.56	4.12		3.71	5.99	4.16			5.46		00.0	37 07 10 6	000	•	5.13
N. and N. W. District. Little Current.	Saugeen	Point Clark	:	:	Goderich 5.56 20.34	Orillia	Parry Sound	Stayner	Gravenhurst	Barrie.	N. Gwillimbury	Georgina	Mean of District 5 · 46 25 · 18	Central District.	Brampton	Toronto.	Welland	Port Dalhousie	Mean of District 5.13 22.81

* Included in Rainfall. † The quarterly means of the Rainfall are derived from the means in Table XXVI.

TABLE XVII .- Quarterly Rainfall at the several Stations, &c. - Continued.

	1073				1674			i				i	Q	Depth of	f Sno	Snow in Inches.	ches.						
	<u> </u>	5			1					1873.							Ä	1874.	}				}
	Autuma.	Year	Winter.	Spring.	Summer.	.amttuA	Year.	October.	По четрег.	December ,	Year,	Total. Precipitation.	January.	February.	March.	JirqA.	May.	June.	October.	November.	December.	Xear,	Total, Precipitation,
ONTABIO.—Continued.									<u> </u>														
N. E. and E. District.																							
Cornwall	6.41	24.04	.04 4.01	98.9	29.8	5.60	21.64	8.0	38.4	15.4	110.1	110.1 35.05 23.4		15.7	17.5	13.9	0.5	 -	S 17	17.9 23	23·9 L	12.5 32.89	36
Peterborough	5.39	19.28	3.44	4.31	8.47	2.30	19.12	2.0	8.9	8 2.2	86.4 2	27.92 16.0		0.9	7.1	3.0	ממ		•	9.1 13	<u>~</u>	54.9 2	24.61
98. Douro			•				•	: 3"	•	•	•	•	•	•			•		•	2.2	7.3		
Belleville	6.42	21.34	29.5	6.26	7.42	4.55	23.82	1.5	24.7	17.5	140.8	$35.42^{18.0}$		6.3	6.5	0.2	0.5	 .		7.3	13·3 68·	မ	30.71
Kingston			60.2	2.08	6.13	4.92	23.55	•	•	•			9.9	5.8 1	18.4	4.0		•	<u> </u>	1.8 11	29.1	্থ	28.94
Brockville 7.60 2	09.2	6.27	99.9	4.36	5.23	4.46	20.71	_=	13.0	17.3	600.3	109.3 37.70 16.3		11.5	12.9	6.01	8.0		. 12.	3.9 21	10	8.98	29.39
Fitzroy Harbor 5.02 21	20.9	09.	3.17	3.34	3.63	2.81	12.95	3.5 1	13.0	9.8	78.4	29.44	25.8 1	19.0	6.9	2.2	υΩ		S 13	3.2 17	က	84.7 2	21.42
Pembroke				5.09			•	<u> </u>	•		•		•		0.2	1.7			σΩ			•	
Ottawa 6.15 21	6.15	21.44	4.59	3.97	4.16	2.83	15.55	3.5	25.7	27.5	106.8	32.124	45.3 2	22.5	30.2	0.9	•	<u>-</u>	. 17	6.	0	140.22	29.57
Mean of District6.16 [22]	6.16	41	4.81	4.63	9.49	%. 55	19.61	2.3	20.1	15.7	105.33	32.94 21	دغر إ	13.8	12.1	6.1	0.1	<u> </u>	S 2	1.2	1 1 -	6.	27.70
Mean for Ontario 5 · 96 24 · 87	5.96	24.87	4.76	86.4	6.13	3.20	19.40	3.5	19.4	13.9	8	100.5 34.90 20.1	0.1	00	8.4	6.9			0.5 13	63	12.9 75	75.0 28	26.90

QUEBEC.																		<u></u>				
Montreal		<u>.</u>	2.08	8.79 10.61 2.65	$\frac{1}{312.65}$	27.13	,	-	•			29.8 12.7	7 28.7	14.4	•	·		12.0	21.4	119·0 39·03	80.68	
Quebec Observatory 7.14	14 28	28.17 1.	1.27 10	10.62 8.6	8.69 3.86	24.44	Ω	36.5	16.3 2	03.84	203.8 48.55 27.0	.0 16.5	28.2	33.5	9 4.0	•	•	22.3	18.8	150.5 39.49	39.49	
Quebec Citadel			_	<u></u>	11.29 2.16		•		-		•	· ·	<u> </u>		•	•		•			•	
Father Point		<u>.</u>	0.71	2.10 2.75		•				•	. 18	18.4 2.7	6.91 2	9 6.4		•	•	•		•		
Huntingdon8:90		25.22	6 89.2	9.17 10.30 5.16	30 5.16	32.31	Ø	19.3	10.3	85.23	85.5 33.77 11.7	.7 4.5	5 9.1	14.4	<u>σ</u> 2	•	0 2	111.5	0.8	59.0 38.21	38.21	
:		18.060	9 06.0	6.11 19.92 7.56	92 7.56	34.49	Ω	13.5	7.0 1	02.62	105 6 28 62 11 3	.3 4.9	9 18.5	2 23.0	0.9		Ω	3.0	13.5	79.2 42.41	12.41	
Cape Rozier		4	4.82 9	9.71	7.23 4.29	26.02			•		_&	29.0 33.5	5 21.5	2 32.0	9.11		•	9.5	17.0	154.2 41.47	11.47	
Lotbinière				8.55			•	•	•	•	•		<u> </u>	<u> </u>	•	· 	•	•				
Point aux Trembles .				. 10.63						-	•				·	•	•	•				
•		_		· 				•	•	•			-	·		<u>·</u>	٠	•	•			
4.8	8.44 23.82		3.41 8.	8.05 8.89	19.+68	25.93	Ω	23.1	11.2	131.6 36.98	6.98 21	21.2 12.4	4 20.5	5 20.3	5.4		ω	9.11	15.7	107 .1	36.64	
NEW BRUNSWICK.	<u></u>		.						,				<u> </u>									
St. John	10.17 37.08	8.	8:01	10.28 9.1	9.14 6.77	34.20	•	15.0	24.8	6.2	96.2 48.30 19.3	37	5 4.4	9.92		•		12.0	16.5	116.3 48.03	18.03	
Bass River 5.	5.50 25.59	. <u>5</u> 813.	3.69	2.8 88.9	8.72 3.51	22.71	ďΩ	33.5	18.5 1	74.24	174.2 41.01 17.6	.6 27.5	3.2	33.0	3.0			0.6	25.9	119.5 34.66	24.66	
Chatham		*	4.12 12	12.39	9.56 3.86	29.93	·	•	•		-83	23.4 18.6	0.6	25.5	6.9	•		0.2	24.8	115 2 41 45	11.45	
Fredericton 8.	8.85 29.46	.46 7	7.12 9	9.62	9.38 5.94	32.00	•	23.5 1	18.8	19.24	119.2 41.38 17.5	.5 20.7	7 15.5	16.3		•		12.2	24.9	107.6 42.85	13.85	
Bathurst 4.	4.03 17.34		1.98	9.51 6.5	6.29 3.44	20.92	•	17.5	7.2	21.1	121 1 29 45 25 5	2.6 2.	2 6.5	18.0	0.0	· 		2.2	15.5	87.5 29.67	29.62	
Dorchester11:	11 . 92 38 . 22	.22 5.67		9.54 8.1	8.16 5.14	28.31	•	10.01	12.0	34.5	94.5 47.67 11.0	0.88 0.	5.0	33.2	-			15.0	24.0	126.5 40.96	96.0	
Dalhousie		3.51		8 14	3.91			•		<u> </u>	. 31	31.5 13.0	12.0	0.8	•		•	2.3	0.6	8.92		
12	7.84 29.14	14 4.72		9.42 8.0	8.02 4.65	36.81	Ø	19.9	T 8.91	10.12	121 .0 41 .56 20 .8	8 23.5	0.8	22.3	2.7			10.1	20.1	106.9 37.50	95.2	
		_										_	_	_					•••			

de. Continued.
Stations,
t the several
Rainfall at t
Juarterly.
TABLE XXVII.—(

		Total Precipitation.		89.0 54.74	88.2 47.69	•	•	22.0 39.13	•	22.69	51.26	40.97	•	45.79	45.60		40.39
		Year.		0.68	88.5	0. 29	•	23.0	0.19	14.3 124.1	21 -4 126 -7	0.78	82.2	8.5 104.0	86.5		127:1
		Десепърет.		0.11	19.4	11.5	•	3.0	28.	14.3	21.4	11.5	2.0	8.5	11.1		36.4 127.1
		November.		2.1	.53	0.2	•	ಬ	0.4	2.0	0.9	0.0	•	3.5	2		0.21
		October,		,	•	•	•			•	•		•	•			•
_	1874.	June		•		•	•	•		•	•	. , ,		•	.		 :
inches		May.		0.1		•	•	-		1.4	1.0	5.0	<u> </u>	•	0		6.0
æ.		.li1qA		29.2	0.92	14.0	•	2.0	12.8	8.87	37.2	21.0	27.0	30.2	6.23		25.4
f Snow		Матећ.		3.2	8.0	0.2		1.0	1.8	11.3	12.6	8.2	10.0	3.5	6.7	***************************************	15.8
Depth		February.		29.9	33.9	16.5	•		85.28	0.2	31.0	0.22	27.0	42.0	26.7		23.7
Å		.Trannat		15.7	18.8	17.5	•	13.0	13.8	21.3	18.5	0.21	13.5	17.0	9.91		12.9
		Total Precipitation.	<u> </u>		•	•	98.99	41.58	•		1.31				53.73		8.41-19
		Year.		91.4 55.45	•	0.68	38.0 46.36	46.54	-£-96	134.9 63.94	23.4 121.2 61.31		•		88.2		97.8
	1873.	December.		18.9	20.5	9.11	11.3	15.0	24.3	17.8	23.41	23.0	20.2	•	9.81		17.5
		Мочетьет.		8.5	9.2	6.2	202	4.0	8.8	6.9	8.2	10.01	3.2		6.2		13.0
		October		•	•	•			•			•	•	•	.		
		Year.		12.52	28.28	•	•	38.19	•	47.34	8.29	32.77		35.39	36.98		189.2
		Autumn.		9.72 14.58 10.70 10.25 45.25	9.53 32.87			10.74	7.45	12.534	9.98.38.29	8.74	0.46	8.90	9.83		6.43.27
1074	4 00	Summer		02.01	10.35	•			•	14.21	8.02	89.9	7.28 10.46	12.50	9.42		9.17
•		Spring.		14.28	72.7			6.18 10.65 10.61	•	12.09	13.29	12.14	•	8.93	10.86	,	7.21
	1	Winter.		9.72	6.73	•	•	6.18	3.65	19.8	7.27 13.29	5.21	12.2	90.9	6.31		28.7
•	3	Year.		45.27	35 . 27	•	42.56	36-93 36-93	•	50.45	16.64	•		•	3.85		11.73
4040	101	.amutuA		18.24 45.	12.67 35.	•	16 60 42	13.21 36.	88.6	16.17 50.	. 13.54 46	12.39	10.74	•	(3.72,42.85		10.40,31
			Scotia.	Halifax	Truro	Digby	Seaforth.	:	Wolfville	Guysberough	Sydney	Glace Bay	Cow Bay	Port Hastings	<u> </u>	P. E. ISLAND.	Charlottetown

=			_		_=								
	15.5 138.6 64.13	1.92 12.25 50.64		•	88.5 47.75	47.8		36.1 18.61	89.0 21.39			66.6	.81_
	138.6	12.25	•	•	88.2	23.4 100.9				•		48.0	•
*****	15.2		34.0	•	70.SZ	23.4		4.0	19.5			0.7	•
	14.8	2.15	0.8	σΩ	5.0	9.3		10.8	23.9	•		18.0	•
			•		•	•		5.6	0.3			•	•
	•	0.03	202	•	•	0.1		-				:	•
	14.8	18.6	02	•	•	9.9				•		•	•
			18.0	0.9	25.0	19.2	<u> </u>	20.00	4.8	·			•
	10.530.3	0.88 1.65	0.9	4.6				3.8	4.8			0.1	-
	32.0	1.46	22.0	1.0,14.6	9.5 18.0	17.0 11.6		4.8	16.3	•		2.2	•
	18.0	2.30	•	2.0	0.6	13.7		9.4	13.7	•		13.2	•
			 -	•	•			4.6		•	 .	•	
	9.92	5-33.4	•	•	•	40.0		58.3 19.41	76.9 24.04	•		18.0	•
	72.1 126.6 38.17	3.09 15.33 45.33	_	•		51.5 140.0 41.76		9.6	18.5			0.9	•
	0.01	0.72		8.0	•	œ 4	 	7.3	10.2	•		7 02	•
	•	*		•	_			9.7	11.4	<u> </u>		•	.
_	72.0	3.29	•		-6- -8-	2	<u> </u>	8.00	2.49	•		5.19	3.80
	7.64 10.79 18.21 13.63 50.27	9.29,38.29	5.41	•	8.2338.90	8.75 37 79		8.15 0.04 15.00	0.37 12.49			0.40	8.90 18.80
	8.21 13	2.58	9.20	1.79	1.64			8.15	08.6	6.48			1:81
	0.79	8.49 15.28	3.26 6.59	10.25 10.81 11.79	3.53	9.30 11.90	<u> </u>	98.3	2.22	•		3.02 1.23	1.11
	7.64	5.23	•	0.25_{1}^{-1}	9.80 13.23	1.84		58 0.45	29.0	•		0.24	7.28 1.11
	21	8	 :	<u> </u>	- -			3.58	35	•	-	<u> </u>	•
	8.39 25	3·29 3·29	•	-		10.76 27.76		0.02 13	0.23 16	•		1.15	2.47
		Harbor Grace 13.29 30	:	:	:	1 न	<u></u>		<u>-</u>	- <u>-</u> -		_	-
Z.A.N.D				:	; go		BA.	:	:		LUMBI		:
Newfoundland.		Grace	:	:	Georg		Manitoba.	.: £	20	ritain	E Co	Bridg	ılt
NEW	St. Johns	rbor (0	Channel	Bay St. George		M	Fort Garry	Winnipeg.	Little Britain	RITISI	nce's.	Eequimault
	ž	Han	• 080.	Cha	Eay			For	Wi	Lit	BRITISH COLUMBIA.	3	E £q
	•	•										-	

* At Harbor Grace, instead of the depth of Snow, the depth of its equivalent in Water is given.

TABLE XXVIII.—Number of Days of Rain in each month, and in the year, at the Stations in Table XXVI.

_		-		_														ie i	
				1873.									1874.						
		September.	October.	November.	December.	Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
-	ONTARIO.																		
į	Windsor	8	9	4	6	76	5	6	5	4	6	9	8	3	4	4	3	2	59
	London	10	9	4	7		•		7	3				٠			•		
stri	Port Stanley.					•	12	8	8	7	8	10	8	5	12	9	5	8	100
# D	Granton	12	12	3	8	99	10	4	7	4	9	11	7	4	12	8	8	2	86
14 E	Woodstock	11	15	3	8	118	11	8	9	4	10	14	2	10	10	6	6	5	95
West and South-West District.	Ingersoll	9	11	2	5	81	7	.6	7	3	8	9	8	3	9	7	5	3	75
sd 8.	Simcoe	7	17	2	6	96	5	1	1	4	7	3	6	4	9	7	4	4	55
st an	Port Dover						10	6	8	6	9	6	9	3	7	6	5	5	80
\mathbf{H}^c	Dundas	7	7	1	3		4	3											
	Hamilton	10	12	3	9	88	10	3	7	4	6	6	4	4	5	4	7	2	62
~ -	Agan for Dist.	$\overline{9\cdot 2}$	11·5	<u></u>	6.2	93.0	8.2	5.0	6.6	4.3	7.9	8.2	6.5	4.6	8.2	6.4	5·4	3.9	75.8
•	Little Current		18	1	2	77	1	2		2	6	13	12	5	14	-8	2	1	68
	Saugeen						6	3	5	2	7	8	10	7	13	15	8	5	89
	Point Clark	20	19	5	7	113	9	6	6	7	8	10	8	5	11	16	11	3	100
9	Stratford	11	10	3	6	90	8	5	9	2	9	15	9	2	.8	9	6	2	84
Sistr	Kincardine	12	15	6	4	95	5	3	4	2	7	7	5	3	12	16	7	3	ì
est I		19	18	4	7	114	9	5	8	5	11	16	10	4	13	15	7	2	74
41	Goderich	1	17	3	4	91	3	1	5	_	8	14	16	3	14	16	1	l	105
Fort	Orillia	18	'	Į	l	71	6	2	5		8	11	9				6	2	
North and North-West District.	Stayner	17	13	1	6			1	1	3				5	9	1.4	2	0	74
\$	Gravenhurst.	17	14	3	5	97	*	1	3	2	11	11	18	3	13	14	6	3	83
Nor	Barrie	16	16	1	5	88	6	2	4	3	9	10	14	4	ш	14	6	1	84
	Parry Sound.					1	١.	٠.					•	•		13	8	3	
	Gwillimbury	7	7	2	5	59	2	2	3	2	6	7	5	2	ß	8	2	0	45
	Georgina	14	16	3	4	94	5	4	5	2	9	9	14	5	11	15	5	1	85
1	Mean for Dist	15 1	14.8	2.9	5.0	91.8	5.3	3.0	4.9	2.9	8.3	10.8	10.4	4.0	11 2	13 3	\$.8	2.0	81.9
**	Brampton	10	10	2	4	86	9	5	7	2	6	11	10	4	6	10	5	4	79
Die	Toronto	14	13	5	10	110	13	6	10	4	8	13	11	4	11	11	7	5	103
Central Dist.	Welland	8	9	4	6	78	12	5	6	4	8	8	11	3	8	8	6	4	83
c_c	Port Dalhousie														7	7	7	3	
	Mean for Dist	10.7	10.7	3.7	6.7	91 3	11.8	5.3	7.7	3.3	7:3	10.7	10.7	3.7	8.0	9.0	6.3	4.0	85.3
-									90										

TABLE XXVIII -- Continued. -- Number of Days of Rain in each month, and in the year, at the Stations in Table XXVI.

=			:	1873.									1874.		~~~				
		Sept.	Oot.	Nov.	Dec.	Year.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
O	NTARIO.—Con.	16	14	2	3	98	6	6	4	3	12	13	13	6	9	12	5		89
ict.	Peterborough.	15	12	2	7	94	7	4	6	3	7	10	11	3	11	13	5	1	81
District.	North Douro.												,		14		7	2	
	Belleville	15	13	4	5	85	6	4	7	5	7	10	12	4	13	15	10	5	98
North-East and East	Kingston		.		•		11	7	10	6	10	13	13	4	13	16	9	9	121
st aı	Brockville	15	17	3	8	105	10	4	7	4	11	10	12	5	10	15	3	5	96
t-Ea	FitzroyHarb'r	15	19	4	5	101	8	4	4	3	11	13	11	6	11	13	2	0	86
Vorti	Pembroke								3	2	9	13			12	18	1		
7	Ottawa	15	16	2	5	82	7	4	5	4	9	8	9	5	11	13	3	1	79
	Mean of Dist	15·2	15·2	2.8	5.2	94 2	7.9	4.7	5.8	3.7	9.5	11.3	11 6	4.7	11.6	14.8	2.0	5.1	93 7
	Mean for Ont	12.6	13.1	3.1	5.9	92 6	8.2	4.5	6.3	3.6	8.3	10.3	9.8	4.3	9.8	11.6	5.6	3.3	85 6
Mo	Quebec. ontreal					•	7	2	6	5	12	14	14	9	8	13	6	1	87
Qu	ebec, Obser'y	12	13	3	3	94	6	3	4	0	12	15	12	ç,	7	14	3	2	87
	,, Citadel						5	2	2	Q.	12	15	12	10	7	12	2	1	80
Fa	ther Point						4	2	4	4	13	14	13	8	10				
Ηt	intingdon	13	14	2	5	97	. 8	3	6	2	14	11	13	5	9	10	6	1	88
Da	nville	13	13	1	4	91	6	2	4	1	14	23	22	8	9	5	5	3	102
Ca	pe Rozier						4	2	5	2	6	14	13	7	7	12	7	1	80
Ca	relton	12	10	, .				١.			4	16		I •	7	5	١.	١.	
Ch	arlesbourg	9	12	2] • •									١.	
Lo	tbinière	١.									6	11	12	8	9	9	3	١.	
Po	intauxTrembles	5	8					١.			2	11	10	3	3	5			
Lé	vis	8	13			 •	! •										١.		
	Mean for Quebec	10.3	11.9	2.0	4.0	94 0	5.7	2.3	4.4	2.0	9.5	14 4	13.4	7.3	7.6	9.4	4.6	1.5	82.1
NI	w Brunswick. John	9	12	6	4	122	8	3	4	2	14	17	12	12	9	8	6	9	104
Ва	as River	12	13	6	3	99	6	3	4	4	14	16	6	15	9	12	5	3	97
Cl	atham			١.] .	5	2	3	5	13	20	13	8	12	8	9	1	99
Fr	edericton	14	13	7	2	102	7	4	5	3	u	16	12	12	12	14	11	4	111
Ba	thurst	11	9	3	0	62	1	0	4	2	8	13	8	7	5	7	4	1	60
	orchester	8	14	8	4	103	7	5	4	3	8	20	7	10	12	9	6	3	94
	alhousie	14	15	١.		.	1	1	5	3	3	15		9	10	11	5	0	
	Mean for N.B.	11.3	12.7	6.0	2.6	97 6	5.0	2 6		3.1	10.1	16.7	9.3	10.4	9.9	9.9	6.6	3.0	90.7
-	5-19½							2	91										

Table XXVIII.—Continued.—Number of Days of Rain in each Month, and in the Year, at the Stations in Table XXVI.

				_				_	==							==	_	
		1	.8 73.									1874						
	September.	October.	November.	December.	Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Nova Scotia.		Ì		-	į	Í				İ	į	-		į	į	1		
Hallfax	15	16	11	8	162	13	4	8	11	15	21	16	15	15	15	13	13	159
Digby	11	12	11	5	115	10	6	7	5	12	13	10	10	8	7	10	8	106
Truro	13	15	10	5	133	12	5	7	5	15	16	13	12	12	11	11	8	127
Seaforth	11	12	11	7	142	
Beaver Bank	8	9	5	3	79	7	3	4	4	6	15	11	13	9	9	6	9	96
Wolfville	8	11	6	5		4	4	4	1	9	.	٠ .		. 8	5	2	5	•
Gaysborough	10	14	7	4	101	7	5	5	5	9	17	9	12	14	11	9	9	112
Sydney	12	13	13	7	117	12	5	9	3	14	18	8	10	12	12	12	10	125
Glace Bay	8	10	15	4	.	8	4	7	3	10	13	6	5	9	5	5	5	80
Oow Bay	6	11	10	6	.	12	3	5	1			8	8	8	10	8	9	
Port Hastings	٠	•			<u>.</u>	5	3	4	2	5	11	7	7	10	8	6	5	73
Mean for N.S.	10.3	12:3	9.9	8.4	121 · 3	9.0	4.3	6.0	4.0	10.6	15.2	9 ·8	10.2	10.2	9.3	8.2	8.5	105.5
P. E. IBLAND																		
Charlottetewn	12	16	8	4	124	11	4	•	3	10	23	14	10	13	13	12	8	127
Georgetown	Ŀ	16	<u>. </u>	<u>.</u>		<u> </u>	4	5	4	11	19	14	11	12	14	14		
Newf'ndland.		İ																
St. John's	14	18	15	5	119	10	4	9	10	10	13	11	6	10	6	10	14	113
Harbor Grace	19	13	18	8	126	13	3	7	2	12	17	17	21	12	19	13	12	148
Fogo	6	17	9				1	5	.	5	5	11	8	9	9	4		ļ .
Channel			11	•		5	2	7	•	8	8	8	9	11	-	6	6	
Bay St. George.	<u> - </u>	<u> </u>	<u> ·</u>	<u> </u>	<u> </u>	8	2	4	1	9	6	8	9	2	7	3	3	62
Mean for N'f'd	13.0	15.0	13.2	6.5	122.5	8.0	2.4	6.4	4.3	8.8	3.8	11.0	10.6	8.8	10.2	7.2	8.0	86.5
Manitoba.							ĺ				İ]		
Fort Garry	14	2	0	0	62	0	0	2	1	10	9	13	7	5	1	0	U	48
Winnipeg	12	4	0	0	64	0	0	2	1	11	7	17	9	8	6	1	1	63
Little Britain	<u> -</u>		<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> -</u>	3	4	5	3	7	<u> </u>	<u> -</u>	<u> :</u>	<u> :</u>
B. COLUMBIA.																		1
Spence's Bridge.	5	2	5	2	41	2	3	0	4	14	9	8	10	9	5	4	2	70
Esquimault	1	4	11	16	<u>l</u> .	17	11	29		5	4	<u> </u>	5	7	6	17	16	102

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Table XXIX.—Quarterly Number of Days of Rain, with the Number of Days of Snow, during the period September, 1873, to December, 1874, inclusive:—

=	Show, durin	8 011	o po	100	Del	700111	, ioi,	101	J, K		Com	Jer,	101	4,	mer	191 4 6	• ;		
		Qua	rterly of	No.	of :	Days	No.	of D: 18	ys S: 73.	now,			No	o. of	Day 187	8 of 4.	Snov	٧, 	
ينوبان		Autumn, 1873.	Winter, 1874.	Spring, 1874.	Summer, 1874.	Autumn. 1874.	October.	November	December.	Year.	January.	February.	March.	April.	May.	October.	November	December.	Year.
(Ontario.					İ												(· · · ·	
	(Windsor	19	16	19	15	10	5	5	3	44	7	4	4	5			3	3	26
i.	London	20					3	13	4	1				1	1		١.	١.	
District.	Port Stanley		28	25	25	22	12		١.		12	11	8	3		1	6	2	43
	Granton	23	21	24	23	18	6	17	11	83	17	13	u	8		1	10	14	74
- We	Woodstock	26	28	28	22	17	5	24	15	97	24	21	14	6		1	9	11	86
South- West	Ingeroll	18	20	20	20	15	3	9	6	45	7	5	11	5		1	7	10	46
	Simcoe	25	7	14	19	15	5	5	4	27	4	3					4	5	16
West and	l'ort Dover		24	21	19	16					11	8	4	7			2	3	35
We	Dundas	11					7	1	3		4	3		,					
	Hamilton	24	20	16	13	13	2	10	8	68	9	8	4	7		2	7	6	43
1	Mean of District.	20.8	19.8	20.7	19·6	15 7	5.3	10.5	6.7	60.7	10.6	8.4	8.0	5.3	0.1	1.3	8.0	6.7	46.3
	Parry Sound					24							•				8	19	
	LittleCurrent	21	5	21	31	11	2	7	4	37	u	4	5	7	1	1	3	7	38
7	Saugeen		14	17	30	28	•				18	12	11	5		2	14	18	80
District.	Point Clark	31	21	2 5	24	30	2	19	9	86	20	15	9	7		2	12	21	86
	Stratford	19	2 2	26	19	17	4	15	8	62	18	10	7	9		1	9	12	66
North-West	Kincardine	25	12	16	20	26	3	13	11	(4	16	11	9	6			12	21	75
orth	Goderich	29	22	32	27	19	6	17	11	82	21	14	10	6			8	15	74
	Orillia	24	9		33	24	4	13	13	86	12	8	13	_		3	10	19	
and	Stayner	20	13	22	23	16	2	11	13		17	12	11	9		3	12	13	87
North	Gravenhurst	22	8	24	28	23	3	12	6	69	7	7	4	2		2	13	16	51
~	Barrie	22	12	22	29	21	4	17	12	79	18	10	14	8	1	2	11	15	79
	N Gwillimbury	14	7	15	13	10	4	11	8	50	12	5	6	2		2	10	8	45
	Georgina		14	20	30	21	3	19	15	82	17		13 	8	·	1	12	17	79
7	Aean for District.		<u> </u>			!	ļ	l		69.7					0.2		i——		.—
trict	Brampton			19	20	19	İ	10	12	63	10	12	7	7		2	7	10	55
Central District	Toronto	28	29	25	26	23	3	18	12	79	15		10	7	•	2	11	15	75
ntra	Welland	19	23	20	22	18	2	8	6	39	8	12	8	8	,	• :	8	4	43
•	Pt. Dalhousie .	<u>.</u>	<u>.</u>	<u>.</u>	<u>.</u>	17	<u>.</u>	<u>.</u>	<u> </u>		<u>.</u>	<u> </u>	<u> -</u>	<u>,</u>			4	4	-
7	dean of District.	91.1	24.8	21.8	22 4	119.8	8.0	12.0		60.3	11.0	13.0	8.8	7.8		1.8	6.2	8.8	57 7

-	TABLE 2	IXX	X	-Qu	arte	rly	num	ber	of	Day	s of	Rai	n, &	гс.—	Co	ntin	nec	l.		_
		Qua	rterl Da	y nu ys Ra	mber in.	of	Nu	mber Snow	of I , 187	ays 3.		N	umbe	or of	Day	s Sn	ow,	187	4.	
		Autumn, 1873.	Winter, 1874.	Spring, 1874.	Summer, 1874.	Autumn, 1874.	October.	November	December.	Year.	January.	February.	March.	April.	May.	June.	October.	November	December.	Year.
Our	TARIO,—(Con.) Cornwall	19	16	2 8	28	17	2	19	11	90	16	11	11	15	3		1	10	16	83
rict.	Peterborough	20	17	20	25	19	2	15	15	77	15	12	11	5	1			9	14	67
District	N. Douro																	13	18	
	Belleville	22	17	22	29	30	2	13	6	5 3	8	14	8	5	١.		1	4	11	51
ud A	Kingston		28	29	30	34					16	14	14	13	1		1	7	12	78
9	Brockville	28	21	25	27	23		17	7	63	11	8	12	9	1			9	13	63
r Ed	Fitzroy H	28	16	27	28		4	11	5	54	13	7	9	7	1		2	5	11	55
North East and East	Pembroke			24	\ •								9	3			2	8	.,	
-	Ottawa	23	16	21	25	17	4	16	7	70	12	8	9	ğ				8	41	56
	Mean of Dist.	23.5	18.4	24 · 5	27.9	22.1	2:8	15 2	8:5	67.8	13.0	10.6	10.4	7.7	0.8	•	1.4	-	9.2	13.6
Me	an for Ontario	21.9	18.9	22.1	23.9	19.5	3.6	12.9	8.8	64.6	12.6	10.5	9.0	6.7	0.3	0.0	1.4		7.9	11.2
Mo	QUEBEC.	·	15	31	31	20	•	-	<u> </u>	·	10	7	16	11	2	•		7	14	67
Qu	ebec Obser'y.,	19	13	27	28	21	5	12	12	82	11	9	12	12	3			10	10	67
Qu	ebee Citadel		9	27	29	18					12	12	10	14	2		1	14	10	75
Fa	ther Point		10	31					١.	.	14	5	10	6						
Ήι	intingdon	21	17	27	27	17	1	12	9	66	18	8	16	7	1	\ •	1	8	11	70
Юa	nville	18	12	38	39	13	2	20	6	70	13	4	17	14	5		1	8	15	77
Ca	pe Rozier		11	22	27	20					6	8	8	6	4			3	5	40
Ca	rleton				.												Ì.			١.
Ch	arlesbourg								١.			ļ .	.,							
\mathbf{L}_{0}	tbinière				29			· .										2		
Ρ.	aux Trembles.				16															
Lé	vis							.					} ·							
TAT:	Mean for Que. EW BRUNSWICK.		12.4	25.8	28:3	15.5	2.7	14.7	9.0	72.7	12:3	7.6	12.7	10.0	3.0		0.6	7.4	12.0	65.6
	John	22	15	33	33	23		7	12	63	9	7	5	13				2	11	47
Ba	ss River	22	15	34	30	20	1	15	10	77	12	10	4	12	3			5	3	49
Ch	natham		10	38	33	18	.				13	12	11	12	2			7	17	74
F	edericton	22	16	30	36	29		11	10	56	9	9	7	10				7	11	53
Ba	thurst	12	5	23	20	12		9	3	39	8	8	6	5	1			4	8	40
D	orchester	26	16	31	29	18		6	6	31	3	7	4	7				3	6	30
p	lhousie		7	21		16				.	8	5	5	5			١.	9	10	42
_	Mean for N.B.	21 8	311.7	8):(28.	19.1	0.3	9.6	8:2	53 2	8.8	8.3	6.0	9.1	0.9			5 3	9:4	47 9

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Table XXIX.—Quarterly number of Days of Rain, with the number of Days of Snow, during the period September, 1873, to December, 1874, inclusive.—Continued.

							===		==				==:						E
	Qui	rterl Da	y nu ys R	mber vin.	of	Nu S	mber now,	of D 1873	аув }.		N	umbe	r of	Day	78 B1	10W	187	4.	
	Autumn, 1873.	Winter, 1874.	Spring, 1874.	Summer, 1874.	&utumn, 1874.	October.	November	December.	Year.	January.	February.	March.	April.	May.	June.	October.	November	December.	Year.
Nova Scotia:								<u></u>			'		, 						
Halifax	35	25	47	46	41		13	17	83	16	14	13	15	2			7	12	79
Truro	3 0	24	36	37	30		12	11	78	15	11	13	16	1			7	15	78
Seaferth	3 0						6	10	45										
Beaver Bank	17	14	25	33	24		3	8	26	5	4	3	10				2	_	
Digby	28	23	30	28	25	١.	9	8	54	12	8	9	14				2	9	54
Wolfville	22	12			12		4	7	48	8	8	3	13				2	5	39
Guysborough	25	17	31	35	29		6	14	64	10	12	13	15	2			8	13	73
Sydney	33	26	35	30	34		6	18	55	13	11	13	12	1	•		5	14	69
Glace Bay	29	19	26	18	15		6	11		13	9	6	8	1			5	5	47
Cow Bay	27	20		24	27	,	2	5		8	6	6	8					3	31
Port Hastings	<u> .</u>	12	18	24	19	<u>.</u>	<u> </u>	<u>.</u>	<u> </u>	5	7	5	9	<u>.</u>	<u>.</u>		3	8	37
Mean for N. S.	27.6	19.2	30.1	30.5	25.7	<u> </u>	8.7	10.9	56.6	10.2	9.0	8.4	12.0	1.4		<u>.</u>	4.6	9.3	55.2
P. E. ISLAND.		!	Į										-						
Charlottetown	28	21	36	37	33		15	15	83	12	12	16	12	3			5	13	73
George Town	·	<u>.</u>	34	37	39		<u>.</u>				13	10	10	1	<u>. </u>	<u>.</u>	6	13	
Newfoundland.					, —		-												
St. John	35	23	33	27	30		9	15	80	11	10	4	8	3			1 0	14	60
Harbor Grace	29	23	31	50	44		13	19	95	13	16	16	14	8	1		9	12	89
Fogo				28			_	13		11	6	6	5	2	4		4	12	50
Channel	•	14		28			10	6		4	5	7	3	•		-	2	7	28
Bay St. George		14	16	19	3		<u>. </u>			5	3	2	8			·-	1	5	24
Mean N.F.L'd.	34.7	17.8	22.9	30.4	29.0	·	10.7	17.7	87 · 5	8.8	8.0	7.0	7.6	4.3	2 · 3		$5\cdot 2$	10	53.2
Manitoba.																			
Fort Garry	2	2	20	25	1	10	11	5	53	7	в	5	4	•		2	13	7	44
Winnipeg	4	2	19	34	8	11	11	9	67	11	10	9	6			5	8	9	68
Little Britain	<u>.</u>		<u> </u>	15	<u>.</u>	·	<u> </u> .				·	·			<u> </u>		<u>.</u>	·	
B. Columbia.																_			
Spence's Bridge.,	9	5	27	27	11		2	5	19	8	7	8			.		10	3	36
Esquimault	31	36	15	12	39			, ,									.		,
	-		<u></u>	<u> </u>	<u> </u>	<u> </u>	·	295	<u>' </u>				-			<u> </u>	·		-

1874 1874 1875 1874 1875 1874 1875 1874 1875 1874 1874 1874 1874 1875	Ę.		Ō	arter	r denth	of Rall						Dej	Depth of E	Snow in Inches.	Inche	_				
W. and S. W. District. April 50 June. <th< th=""><th></th><th></th><th>·</th><th>·#</th><th>іворев</th><th>,</th><th> </th><th></th><th>188</th><th>es </th><th></th><th></th><th>Į</th><th></th><th> </th><th>1874.</th><th></th><th></th><th></th><th>-</th></th<>			·	·#	іворев	,			188	es			Į			1874.				-
WV. and S. W. District. 7.08 5.85 5.53 6.54 3.44 5.1 15.6 12.7 106.3 16.0 9.4 3.8 4.9 0.0 5.3 W. and N. W. District. 5.46 3.39 5.44 5.05 4.34 3.8 26.4 14.0 110.6 32.6 11.9 13.6 6.5 0.1 0.9 W. and N. W. District. 5.46 3.39 5.44 5.05 2.59 2.9 15.9 13.0 80.6 10.2 16.0 4.0 10.0 0.9 W. and M. W. District. 6.16 4.81 4.65 6.57 2.9 15.9 15.9 13.0 80.6 10.2 16.0 4.0 0.0 8.0 Datastrict. 5.96 4.76 4.98 6.13 3.50 2.3 11.2 13.1 13.9 10.0 2.0 10.0 0.0 8.4 6.9 0.1 8.4 8.0 8.4 8.0 8.0 8.0 8.0 8.0	•		December,	January to March, 1874.	'#/8T	September, 1874.	December,	October,	Иочетьет.	ЛесешЪег.	Year.	January.	February.	March.	.lirqA	May.	October,	Иочетьет.	December.	Хевг.
X. and N. W. District. 5 - 46 3 - 39 5 - 44 5 - 56 4 - 34 3 - 8 26 - 4 140 110 - 6 32 - 6 11.9 13 - 6 11.9 13 - 6 10 - 6 <t< th=""><th>16</th><td>: 012712</td><td>90.</td><td></td><td>ž.</td><td></td><td>3.64</td><td>÷</td><td>6</td><td></td><td></td><td>16.0</td><td>9</td><td></td><td>6.4</td><td>0.0</td><td>5.3</td><td>12.3</td><td>5.0</td><td>53 3</td></t<>	16	: 012 71 2	90.		ž.		3.64	÷	6			16.0	9		6.4	0.0	5.3	12.3	5.0	53 3
Contral Fistrict. 5·13 4·97 4·45 5·57 2·59 2·9 15·9	ş	W. and N. W. District.	5.46			2.38	4.34	80	26.4		9.01)	32.6	6.11	13.6	6.5	0.1	6.0	6.41	21.4	6.701
6 16 4 81 4 65 6 -46 3 59 2 3 20.1 15 7 105 3 21 5 13 9 105 7 21 5 13 8 12 1 6 1 6 1 0 1 8 4 4 7 4 72 9 42 8 6 2 4 66 8 13 9 16 3 121 6 12 8 8 4 6 0 0 1 13 7 4 4 72 9 42 8 62 4 66 8 13 9 16 3 121 0 20 6 20 3 5 4 13 7 2 6 7 1 10 5 9 4 6 9 8 13 9 16 8 12 0 20 6 20 3 20 3 21 0 10 4 6 7 7 6 4 7 7 6 10 3 1 7 8 7 13 0 17 6	296	Central Listrict,	5.13	4.97	4.45	5.57	2.29		15.9	13.0	9.08	10.5	16.0	4.0	10.01	0.0	Ω	11.8	7.1	29.1
8 * 44 3 * 40 6 * 13 3 * 50 3 * 5 19 * 4 13 * 9 100 * 5 20 * 1 12 * 8 8 * 4 6 * 9 0 * 1 7 * 84 3 * 41 8 * 02 9 * 61 8 23 * 1 11 * 2 131 * 6 21 * 2 12 * 4 20 * 5 20 * 3 5 * 4 7 * 84 4 * 72 9 * 42 8 * 02 4 * 65 8 19 * 9 16 * 1 18 * 6 22 * 6 8 * 0 22 * 3 21 15 * 72 5 * 51 10 * 85 9 * 75 9 * 84 6 * 2 18 * 6 88 * 2 16 * 6 26 * 7 6 * 7 27 * 9 9 * 4 16 * 40 4 * 87 7 * 62 17 * 6 <		M. E. and E. District	91.9	4.81	4.65	94.9	3.59		20.1			21.2	13.8	13.1	6.1	0.1	100	2.11	17.1	81.9
8.44 3.41 8.02 9.89 4.61 S 23.1 11.2 131.6 21.2 12.4 20.5 20.3 5.4 7.84 4.72 9.42 8.02 4.65 S 19.9 16.3 121.0 20.8 23.5 8.0 22.3 2.1 13.7 6.2 18.6 88.2 16.6 26.7 6.7 22.9 0.4 10.40 4.87 7.62 10.31 7.98 . 13.0 17.5 97.8 12.9 39.8 12.3 29.4 0.7 10.76 7.84 9.30 11.90 8.75 . 8.4 61.6 140.0 13.7 17.0 11.6 6.6 0.19 6.51 4.80 67.6 9.1 10.6 67.6 67.6 67.6 67.6 67.6 67.6 67.6 67.6 67.6 67.6 67.6 67.6 67.6 67.6 67.6 67.6 <td< th=""><th>Ő</th><td>Statio</td><td>2.36</td><td></td><td>4.98</td><td>6.13</td><td>3.50</td><td>3.2</td><td></td><td></td><td>100.5</td><td>20.1</td><td>12.8</td><td></td><td>6.9</td><td>0.1</td><td>9.0</td><td>13.3</td><td>12.9</td><td>15.0</td></td<>	Ő	Statio	2.36		4.98	6.13	3.50	3.2			100.5	20.1	12.8		6.9	0.1	9.0	13.3	12.9	15.0
7.84 4.72 9.42 8.02 4.65 8 19.9 16.3 121.0 20.8 8.05 8.0 22.3 2.1 15.72 5.51 10.85 9.75 9.84 6.2 18.6 88.2 16.6 26.7 6.7 22.9 0.4 16.40 4.87 7.62 10.31 7.86 13.0 17.6 17.9 17.9 17.9 17.9 0.7 10.76 7.84 9.30 11.90 8.75 8.4 61.6 140.0 13.7 17.0 11.6 19.2 6.6 0.19 6.51 4.80 67.6 9.1 10.6 5.8 6.7 7.7	Ö	c		3.41		68.6	4.61	ω 	23.1	64	9.181	21.2	12.4	20.2	20.3	5.4	ß	9.11	15.4	8.901
13 7 7 2 6 5 1 13 0 1 13 0 17 5 18 6 1 18 6 1 16 6 1 26 7 6 7 7 22 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	×	Franswick	7.84	4.72	9.42	8.03	4. 8.	0 0	6.61		0.121	8.0%	9.82	9.8		2.1		10.1	20.1	106.9
10.40 4.87 7.62 [10.31 7.98 . 13.0 17.5 97.8 12.9 39.8 12.3 29.4 0.7	×	wa Scotia	13.72	<u></u>	10.80	9.75	9.84	•	7.9	18.6	88.2	9.91				4.0		2.1	11.11	86.5
10.76 7.84 9.30 11.90 8.75 . 8.4 51.6 140.0 13.7 17.0 11.6 19.2 6.6 0.13 0.15 4.30 8.72 0.20 10.6 8.9 10.9 67.6 9.1 10.6 5.8 6.7 .	4	ince Edward Island			29.	10.31	2.38	*	13.0	17.5	8.26	12.9	39.8	12.3	29.4	2.0	•	9.8	3.2	136.9
0.12 0.51 4.30 8.72 0.20 10.6 8.9 10.9 67.6 9.1 10.6 5.8 6.7		:	10.26	7.84		11.30	8.75	•	8.4		140.0	13.2	0.21	9.11	2.61	9.9	0.1	6.6	₹.82	6.001
	黑	Manitoba	0.12	19.0	4.30	8.72	0.50	9.01	6.8	10.9		9.1	9.01	80 10	2.9	•	1.2	17.3	9.11	9.79

Days of Rain in the several Provinces of the Dominion of Canada and the 46.3 0.6953.5 51.0 9.6929.6 9.29. 189 X 4 ġ 22 ġ 10.0 13.6 15.013.0 0.8 16.2 8.3 December. Ġ 10.3 5.3 5.2 2.5 6.5 November. ġ 5.3 10 October. 0.1 0.5 8.0 0.3 6.0 1874. May. Number of Days of Snow. 10.0 12.0 5.3 .linqA ò 13.0 8.0 6.6 8.3 10.4 12.7 0.9March. 13.0 9.01 2.01 15.2 8.3 Rebruary. æ ò 9.01 11.0 13.0 12.6 8.9 8.8 January. 12 Š 9 Ġ ġ number of Days of Snow, from September, 1873, to December, 1874, inclusive. 60.3 64.6 87.5 2.09 8 Year. ġ 92 .29 Ż ġ ä Ŝ 10.0 80 8.5 6.01 2.21 December. 2 1873. 9.0114.0 15.0 14.7 2.01 November, ä 2 Ė # 3.4 3.0 **2**.8 0.5 2.2 10 October. 2 Осторет to December, 1874, 15.7 19.3 22.1 ຂີ 5 61 ġ ż 8 Quarterly number of Days Rainfall. September, TABLE XXXI.—Quarterly Average number of 9.6127.9 22.4 30.4 33 33 8 28 ġ 55 Ŕ July to April to Land. 21.3 24.2 30.0 6.73 20.4 30.1 ż ż 33. 52 13 8.61 24.3 January to March, 1874, 11.7 5.0 Ė 18 <u>8</u> 12 19 넒 14. October to December, 1873. 22.7 20 21.96.2121.3 21.1 34.7 3 33 85 24 : Central District..... W. and S. W. District ... N. and N. W. District. R. and E. District Now Brunswick Prince Edward Island. Nova Scotia Newfoundland, CRIMERO: Oztario . . Manitoba 2 297

TABLE XXXII.—Average depth of Rain in inches, in the several Provinces of the Dominion of Canada from September, 1873, to December, 1874, inclusive.

	Year.		27.36	19.12	17.58	19.21	19.40	25.93	18.92	36.95	30.23	37.79	13.74
-	ресеmber.		0.83	83	0.16	0.23 1	$0.39 \mid 1$	0.39 2	0.63	3.65 3	19.	3.34 3	
}-	November.	<u> </u>	$1.19 \mid 0$	1.14 0	0 02.0	0.65 0	0.65	1.69	2.19 0	3.12 3	. 62	3.28	10.0
-	October		1.42 1	2.88 1	1.73 0	2.21	2.19 0	33	1.83 2	3.06	2.79 2.	2.13 3	0.14 0
	September.		1.91	- 2	1.96	83	2.16 2	.23	1.90	4.80	4.96	8	8
	Auguat.		1.70 1	0.04 2	0.37 1	1.18 2.	1.05 2	2.12	3.66 1	2.65 4	2.28	6.13 2	99.
1874	July.		2.93	2.45 0	3.24 0	3.06	2.92	5.54 2	2.46	9	3.06	\$	3.76 2.
1	June.		2.31 2	2.79	1.49	2.18	2.19 2	4.39	5.61 2	2 11.9	3.10	4.46	2.44
	May.		1.71	1.93	1.79 1	1.55	1.75 2	2.96	2.29	4.13 6	4.09	\$ 17.5	1.76
	.li1qA		1.76	0.72	1.17	0.92	1.14	0.67	1.02	0.96	0.42	0.37	0.10
	March,	<u> </u>	1.36	1.17 { (1.12	1.36	1.25	1.55 (2.22	2.81	1.82	3.62	0.21
	February.		1.37	0.76	1.17	1.29	1.16	0.53	86.0	1.32	0.76	28.0	0.00
	.Trannat	L	3.12	1.48	2.68	2.16	2.36	1.83	1.49	2.38	30.7	3.32	0.00
	Year.		29.01	. 51.9	22.81	22.41	24.85	24.15	29.14	42.85	31.73	92.22	14.96
	December.	- 	2.31	1.30	1.79	1.36	1.69	0.23	0.48	1.16	9.0	1.90	0.00
1873.	Мочетьет.	<u> </u>	1.05	09.0	29.0	0.62	0.74	82.0	2.85	28.9	2.78	2.58	00.0
	October.		3.55	3.56	29.7	4.18	3.41	20.2	4.51	₹2.9	7.34	3.58	0.12
	September,		2.72	4.77	2.66	5.38	3.28	3.38	3.39	4.14	4.17	18.2	2.11
•		Grtario:	W. and S. W. District	N. and N. W. District	Central District	N. E, and E. District	Ontario	Quebec	New Brunswick	Nova Scotia	Prince Edward Island	Newfoundland	Manitoba
j)	1	Ğ				29	8	Φ,	K	M	H	M	ď

TABLE XXXIII.—Average number of Days of Rain in the several Provinces of the Dominion of Canada, from September, 1873, to December, 1874, inclusive.

873.	Теет. Теет. Теет. Теет. Тертивту. Магећ. Тиду. Лиду. Тиду. Тиду. Тертепрет. Тиду. Тиду. Тосторет.		2.8 6.5 93.0 8.2 5.0 6.6 4.3 7.9 8.5 6.5 4.6 8.5 6.4 5.4 3.9	2.9 5.0 91.8 5.3 3.0 4.9 2.9 8.3 10.8 10.4 4.0 11.2 13.3 5.8 2.0	3.7 6.7 91.3 11.3 5.3 7.7 3.3 7.3 10.7 10.7 3.7 8.0 9.0 6.3 4.0	2.8 5.5 94.2 7.9 4.7 5.8 3:7 9.5 11.8 11.6 4.7 11.6 14.8 5.0 3.1	3.1 5.9 92.6 8.2 4.5 6.3 3.6 8.3 10.3 9.8 4.3 9.8 11.6 5.6 3.3	2.0 4.0 94.0 5.7 2.3 4.4 2.0 9.5 14.4 13.4 7.3 7.6 9.4 4.6 1.5	6.0 2.6 97.6 5.0 2.6 4.1 3:1 10:1 16.7 9.3 10.4 9.9 9.9 6.6 3.0	9.9 5.4 121.3 9.0 4.2 6.0 4.0 10.6 15.5 9.8 10.2 10.5 9.3 8.2 8	8.0 4.0 124.0 11.0 4.0 5.5 3.5 10.5 21.0 14.0 10.5 12.5 13.5 13.0 9	3.2 6.5 122.5 9.0 2.4 6.4 4.3 8.8 9.8 11.0 10.6 8.8 10.2 7.2 8.0	0.0 0.0 63.0 0.0 0.0 0.0 2.0 1.0 8.0 6.7 11.7 6.3 6.7 3.6 0.5 0.5
1873.	December.		2.8 6.2	2.9 5.0 91	3.7 6.7 91	2.8 5.5 94	6.9	4.0 94	6.0 2.6 97	5.4	8.0 4.0	13.2 6.5	0.0 0.0
	September.		9.2 11.5	15.1 14.8	10.7 10.7	15.2 15.2	12.6 13.1	10.3 11.9	11.3 12.7	10.2 12.3	12.0 16.0	. 13.0 15.0	13.0 3.0
		ONTARIO:	W. and S. W, District	N. and N. W. District	Central District	56 N. E. and E. District	Ontario	Quebec	New Brunswick	Nova Scotia,	P. E. Island	Newfoundland	Manitoba

Table XXXIV.— Comparison of the Rainfall of different Years in the several Districts of Ontario, and in the different Provinces, 1869 to 1874, inclusive.

		January.	February.	March.	April.	Мау.	June.	July.	August.	September.	October.	November.	December.
	(1869								<u> </u>	3.90	1.67	2.45	3.73
	1870	6.01	1.21	1.39	1.70	2.00	3·55	6.64	3.74	2.77	3.85	1.66	1.40 35.93
Ontario,	1871	1.04	0.38	3.52		1 63		i i		1	0.88		1.04 22.30
W. and S.W. District.	1872	0.57	0.65	⊢ i	1.44		2.25	1.83	i	4.37	2.45	0.20	0.22 20.16
***************************************	1873		0.16		3.04	2:33	3.47	3.22	2.26	2.72			2.31 29.01
	1874	3.12	1.37	1.36	1.76	1.71	2.31	2.93	1.70	1.91	1.42	1	1'19 21'36
	(1869		101	100	1,0		2 01	2 30		2.74		0.77	0.91
	1870	1.03	0.19	0.18	2.02	1.85	3.74	6.12	2.66	3.19	4.90	0.38	0.60 27.47
	1871	0.26	0.08	- 1		1.31	2.29	1.14	1.24	1		1.72	0.37 16.96
N. and N.W. District	1872	0.02	0.55	0.53	1.29	3.08	2 43	2.79	1		1	0.91	R 21.20
Í	1873	1.43	0.07	1.04	2.58	2.52	2.32		2.05	4.77			1.30 25.18
i	1874	1 46		1.17		1.93			i 1		ì		0.32 19.13
	(1869)	1 40	0.70	7 71	0 12	1 99	219	2 45	0.91	2 30	0.94	2.39	273
	1870	3.94	0.52	0.26	2.71	0·91	5.60	3.06	2.47	5.39			2.05 30.46
	1871	0.96	1						2.07	1.72		2.24	0.57 20.33
Central District	1872	0.16	0.49	0.62					2 29	2.97		0.20	0.25 18.13
	1873	1.22	0.52			ļ			1				-18:00
!	1874	2.68				1.86	1.74					0.67	0.16 17.58
	(1809	2 08	1.17	1.12	1.17	1.79	1.49	3.24	0.37	1.96	1.73		
	j l	1.69	0.47	0:40		1.00	0.00		1.00	6.46	, !	1.72	0.37 22.70
	1870	0.68	0.36				1			2.80	1		- 1-0-15
N.E. and E. District	1872	0.12	0.77	1.72		1.46			1.63	1.39		1.90	00.95
	1873	0.95		0.01		3.00	}			! ;		0.75	30.41
			0.02		2.18	1 29		3.13	1				0.23 19.51
	(1874	2.16	1.29	1.36	0.82	1.55	2.18	3.06	1.18			0.65	!
	1869	,		0.50			•			4:37	1.65		2·30 1·11 29·14
	1870		0.60						2.67	3.54	1		10.68
Ontario	1871	0.81	0.22			1.56	2.74	1.90			1.18		0.18 20.12
	1872	0.23	• • •				()		2.51		3.00		04-65
:	1873	1	1	1.54		2.00		1	2.04		3.41		10.40
	1874	2.36	1.16	1.32	1.14	1.75	2.19	2.92	1.05	2.16	2.19	0.92	0.39 10

Table XXXIV.—Comparison of the Rainfall of different Years in the several Districts of Ontario, and in the different Provinces, 1869 to 1874, inclusive.—Continued.

_		January.	February.	March.	April.	May.	June,	July.	August.	September.	October.	November.	December.	Year.
	1869				Ī.	Ī.				3.50	5.12	0.33	0.50	
	1870	0.64	0.31	0.06	0.67	1.54	1.90	4.29	2.79	2.25	4.15	2.34	0.42	21:36
0	1871	1.10	0.17	2:36	2.56	1.21	1.79	5.83	3.27	2.08	3.83	0.83	0.45	25 48
Quebeo	1872	0.07	0.01	0 01	1.20	2.72	2.44	3.93	4.48	3.84	3.59	2.22	0.64	25.45
	1873	0.30	0.10	0.38	1.64	2·2 3	2.11	3 21	2.51	3.83	7:07	0.78	0.29	24.15
	1874	1.33	0.23	1.55	0.67	2.96	4.39	5.24	2.28	2.39	2.23	1.69	0.46	26:32
	1869			•	٠				.			.		
	1870	•	•		4.15	1.62	2.90	2.96	2.70	2.79	6.41	5.43	1.08	l . !
New Bronswick	1871	1.64	1.28		3.32)		2.99				35.24
	1872	1		1.28	1.44	· '	3.77			3.17				39.96
	1873									3.39	1	Ι .		29.14
	1874		0.98	2.25	1.02	2.79	5.61	2.46	3.66	1.90			l	26.81
	1869	1 1	4.07			1-05	0:01	0.15			7.12	1	i	1
	1870 1871	4·79 2·20		0.67 2.92	Į	l	Į	l	}			1	ļ	46·23 36·64
Nova Bootia	1872			i	1	1		į	l	1	5-24	1		42.30
	1873	i	İ	1	1	1		1	ì		6.74	1	1	42.85
	1874	1		}		1	1	ì	1	Ì	1	į	}	36.95
		1		1	1						1		"	

Table XXXV.—Differences between the Rainfall at Stations on Table XXVI, and the average Rainfall derived from three or more years. The differences being marked (+) or (-) according as the Rainfall in the Table XXVI is greater or less than the Standard with which it is compared.

			1 10 13										
	January.	February.	March.	April,	May,	June.	July.	August.	September.	October.	November.	December.	Tear.
Ontabio.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Little Current.			1			i e				1 '			,
Goderich	i												
Kincardine) :	1		l						-0.34	5.91
Stratford	+2'04	Ï					I i	1	i i			-0.83	!
	+0.97		2 ·85					ì		1			ľ
Windsor	i			· '									
Woodstock	+2.48	+1.26	+0.54	-0·21	-1.11	-0.03	+0.39	-3.42	-1.32	-1.56	+0.04	+0.42	-2.49
Barrie	+0.54	+1.02	+0.03	—1·1 5	1.46	-0.27	-1.10	-0.81	-1.04	-0.83	—1·19	0.63	6·9 9
Stayner	+0.97	+0.30	+0.54	2 ·49	-1 31	-0.41	-1·4 6	-0.08	-1 46	0.02	-0.28	0.00	-6.02
N.Gwillimbury	+0.83	+0.40	+0.45	-0 82	-1.13	+1.20	 0·9 9	-1.28	-2.27	-1.48	0.80	-0.32	-5·94
Gravenhurst	+0.35	0.32	+0.12	-1.70	+0.41	+1.23	+0.35	-1.17	-0.48	+2.27	-0.41	+0.38	+0.72
Brampton	+0.70	+0.13	+0.20	-1.48	-0.74	-0 ·86	+1 36	1.32	-0·13	-0.98	-0.16	-0.62	_3.59
Toronto	+1.63	+0.30	-0·2 0	—1 25	-1.69	—1·12	+0.17	-2.59	-2.11	0.99	- 1 ·92	1.55	-11 33
Peterborough	+0.30	+0/12	- 0.65	—1 50	-1.95	0.88	+2:05	-1.85	1 63	-0.37	2·1 0	- 1.60	-10.06
Cornwall	+1.88	-0.12	+1.33	-1.11	+1.61	-1.14	+1.42	+0.40	-1.46	-1:21	-1· 2 7	- 0.03	+0.30
Belleville	+0.92	+1.09	+0.20	-0.66	-0.20	0:03	+0.81	-0.86	-0·78	+0.43	-1.49	1.49	<u>_2·06</u>
Fitzroy Harbor	+1.86	+0.35	-0.68	-0.61	—1 ·31	+0.03	-1.50	1•66	-0.40	1.07	-0 ∙43	0· 26	-5.68
	1												
QUEBEC.		. 0. 20	0.00	. 0.74		. 0.01	. 0. =0	0.0=	0.05	0.10		0.50	. 4.02
Montreal	i											1	
Huntingdon	- 1						1				- 1		
Quebec	-0.25	0.00	+0.82	-1.14	+4'01	+2'98	-1-3-31	-2.49	-1.73	-1-0.04	-0'41	-1-0.36	-1-0.09
N. BRUNSWICK					1	ļ]	ļ			
St. John	 -0·34	-0.59	-1.04	-1.80	- 1.74	- -3:17	1.63	-l-0·17	-2.12	_3·82	-1·53	-0.56	<u>_8·07</u>
Bass River	- -0· 2 5	- -0:03	- -0:49	-1.73	-1-0-39	0.04	-0.93	- -1:73	-0.96	-3·63	_1 ·98	-0.69	_7.07
									}				
N. Scotia.	أييا	أييا	10.50	1.00	10.20	14.00	0.00	0.01	اءما		المرا	ا اممادا	10.17
Halifax		1	- 1	ţ	ı	i	l	Į.	1		1		
Glace Bay			- 1	1	- 1	1	1	1	1	ŀ	l l	1	
Sydney	-1.03	-1.43	-1-0.88	-2·79 ₍	-(-2 61	302	-1.68	-3.12	-1.12	-1.64	-3.90	-0.43	-10.83

Table XXXVI.—Differences between the Mean Temperature in Table IV and the Average Temperature derived from three or more years. The differences being marked (+) or (-), according as the Means in Table IV are greater or less than the Standard with which they are compared.

													
	January.	February.	March.	April.	May.	June.	July.	Angust.	September.	October.	November.	December.	Year.
							,						
ONTARIO.			1										
Little Current.	+2·6	- 0.2	- -0.7	_4·8		-2·1	-0·3	-1·3	- -0.4	- -0·8	- -2·8	- -0·4	
Fitzroy Harbor		-0.5	0.0	10.0	0 ·9	-3.6	-0.5	-2·8	- -4.5	-0.9	- -1-3	-2.1	-1.5
Cornwall	+1.4	-2.4	. .1.4	_8·6	-1·2	-3.4	-0.3	-2.7	- -2.0	 - -0:3	-]-0·7	- -0-1	 —1·0
Gravenhurst	+5.6	0.0	- -2-4	7.1	- -1-1	-0.8	-0.3	—2·0	- -6-8	-0.4	-1-3.6	- -4-4	-[-1-1
Barrie	+2·1	-1.0	-0.1	-8.6	- -0.7	-2.2	2.2	-0.4	- -4.0	-]-0-9	- -1-3	- -2-8	-0.3
Peterborough .	+2.1	-1.0	-0.1	-8.7	- -1-2	-1.8	-0.6	-0.4	-1-4-9	- -1-4	- -1·0	-1-4-0	- -0-2
Kincardine	-3 ·2	-8.3	- -0-7	-8.4	- -1-9	-2.8	-1.5	0.0	- -3.6	-6.2	-4.5	- -6-4	-1.8
Belleville	+2.3	0.0	- -0.6	-8.6	-0.1	2.3	-2.7	-0.5	- -3.7	-0.3	- -0:3	- -2·2	-0.4
N Gwillimbury	+3.3	+2.0	- -0-7	-9·6	-1.7	-2.6	-0.7	-2.0	-1-4-4	0.9	- -1-5	- -3-6	-0.1
Goderich	+1.2	+0.2	- -2·1	-7·8	- -2-6	- -1-2	+0.9	-0.7	- -5.1	-1.1	- -2:0	- -1 8	-1-0-8
Brampton	+5.2	+1.4	- -1-1	- 8.5	- -1-2	-0.7	-0.8	-1.1	- -5.2	-1-0.5	- -4-1	-1-3-3	- -1-0
Toronto	+1.7	-0.5	-0.7	-6.9	- -0.9	- -0·8	+0.2	- -0.9	- -5.2	- -1-6	-1.8	- -0-1	- -0-2
Stratford	+3.4	+0.6	- -2-2	-9.5	- -1-3	- 0.4	-0.2	- -0·6	- -4.6	- -0-4	0.0	-1-0-5	-1.0.4
Hamilton	+4·8	+1.2	-1-3.8	-7.4	- -2:3	-0.9	-1.3	- -1-3	-j-5·9		- -2 2	- -1-7	-[-1.7
Woodstock	+5.6	- -2-3	-1-5.7	-8.8	-[-0.5	-[-0.3	0.5	- -1.7		-0.2	-1-2-7	- -5.2	-[-1-3
Simcoe	+1.6	- -4.6	- -1-1	-8.7	-1-3-0	- -2-6	-1-2-9	-1.1	- -3.9	- -1-1	-1.1.3	-1-3.2	- -1-3
Windsor .,	+3-4	-1-0-8	- -2.8	-8.7	- -3.3	- -1-3	-0.8	-0.3	- -4.9	-1-0-9	- -1-5	- -3 2	-1-1-1
Ouwana						İ	1						
Quebec	+0.7	_2·8	0.8	6.0	- 3.2	7.7	0.0	-1.4		-1.9	-2.7	-4.3	-2.5
Huntingdon.	}	- -0.6] ~] "	-4·3]	!	1	- -1.2	-2.7	-2.1	-1.0	1
anipringatou	+ 0.9	-1-0.0	1-03	12 0	- 3	-03		-02	-1-1 2				-2.1
N. Brunswick						1			j	}	j		
St. John	+4.7	_2 ·8	- -1.2	-5.6	-0.2	-0.9	-0.5	-1-0.5	- -2.7	- -3·2	-0.1	-1.4	- -0-2
Bass River	+5.4	-2.5	- -2·1	-5.9	- -2·1	-7.7	-0.1	-3.9	- -1.8	- -3.2	- -1-3	-1-0-3	-0.4
NOVA SCOTIA.]		1]			j					
	+4.3	_3 ·8	-1-2.7	_4.7	-1-1-8	-6.0	-1.1	-2.0	••0	-1-0-4	1.0	-1-0-4	0.9
Glace Bay		i	2-2	1	-j-2·1	_7·6	-2:0	i	-2.2	-0.9	-0.1	-1.8	1
Digby	+3.2	-2.1	- -0.8	_6·1	-0.4	-2.0	-1.5	1	-1-1-5	- -0.7	-2.2	-1-0.9	-0.5
Sydney	1	i		1	-1-1-2	4.7	-1.3	1	1-0.3	-2.6	-0.9	- -2.1	_0.7
						303					<u> </u>	1-1	

303

Days of Snow. 17 TABLE XXXVII.—Abstract of Meteorological Observations made during the year 1872-73, at the Lighthouse S.W. point of the Island Snow. Snow. 25.2 0.02 1.0 inp lmp imp Janom A Jo Days of Rain. 0 2 2 Ė Rain. 7.35 6.533.85 3.84 800 Amount of Ė 5.8 3.5 3.5 force of wind. Mean estimated Calm. 2 2 ន 83 \$ 22 46 27 3 2 8 4 8 35 띪 3 88 'M'N 2 10 Š ,W Number of Winds from 2 6 # .W.R of Anticosti, Gulf of St. Lawrence, by Edward Pope, in charge of Lighthouse. 2 2 55 s. 2 14 32 ಭ 뛇 19 257 2 R 8 B'E' 1872. 2 2 23 E. 2 0 22 23 N'E' 29 2 Ħ 'N 8 Mean amount of Cloud, 2 2 2 47 8 8 2 છ 3 67 17 8 88 30.0 0.24 -12.0 15.0 31.0 10.27 4.0 3.0 0.0 Extremes of Temper-sture. ဒ္က Lowest K .2|61.0 34.6 66.0 Highest 0|17.0|15.0|3616.1 21.0 19.5 17.8 32. 9 20 3 54 8 55 0 66 3 41.3 43.7 42.0 41.6 62 8 53.3 .nsoM* .68 7 32.8 32. 48.1 47. 9 29 2 28 16.2 18.0 16.3 16. 35.1 .M.T 8 0 896. 7153 39.2 40.8 89. 46.3 48.7 10 32.3 34.1 P.M. .2 57 .924 .06.9 13.0'17.54.8 55. 36. .M.A 8 ġ 25 ġ ੜ January..... Month. February November... September December Year...

*Norm.—The means of temperature are derived from the observations of 8 a.m. and 8 p.m., excluding those at 2 p.m.

TABLE XXXVII.—Continued.

		to syaC .word		8	6	12	∞	٠		٠	•	•	~	<u> </u>	ទ	88	,
	Snow.	Amount to wond	.ii	2.3	44.5	25.8	14.8		σα	•		•	σΩ	8 8.1	imp.	fmp.	
	ñ.	Days of Rain,		-	-	64	H	3	#	13	91	ឌ	16	m	69	81	
 	To start to		ij	0.83	В	88:0	0.01	2.29	2.21	4.33	3.00	3.45	3.07	0.15	0.20	20.22	2 p.m.
p p	otemite baiw to	Mean e		6.4	8.7	5.3	2.0	3.0	2.2	2.3	2.2	2.5	3.5	3.9	3.7	3.5	lose st
		Calm.		-	н	a	ю	ដ	15	16	77	Ħ	63	-	0	28	means of temperature are derived from the observations taken at 8 a.m., and 8 p.m., excluding those at 2 p.m.
		.W.N		49	23	17	8	£	32	8	ଛ	83	6	23	<u>8</u>	424	., exclt
	ä	. W.		7	13	0	4	ಣ	0	67	,- 1	4	0	13	70	23	38p.m
	ıds fron	.w.s		-	13	4	0	0	0	9		4	က	-	9	88	, m. san
	of Wir	.8			1-	80	0	0 ,	~-	87	4		က	7	67	\$	1 at 8 a
	Number of Winds from	B.E.		00	త	۲-	19	6	4	\$	9	ಬ	16	2	12	139	ne taker
		E.		6	Ħ	14	on.	15	83	0	17	**	8	•	60	175	rvation
		N.E.		70	ю	23	۲-	m	0	63	es	-	63	0	10	123	he ohse
		'N		20	4	12	13	-	9	ĸ	14	4	0	ΥĠ	61	76	from t
1	pı	Mean an Clor		83	52	8	61	38	42	99	43	51	72	75	2	8	rived
	Extremes of Temper- ature.	Lowest	0	0.02-	-18.0	0.6	24.0	52.0	0.88	20.0	45.0	0.17	0.08	-0.6	3.0	0.0%	are de
	Ext.	Highest	0			0.28	0.949.	-0. 12	0.98	<u>و</u>	0.69	57.0		-0.0 0.0	0.6g	273.0	atur
-		*Mean.	0	4 13 2 12 3 11 2 34 0	0.98.0.6	7 27.6 23.9 23.3 37	79.18	341-1 38-1 38-2 55-0	49.8 66.0	1 60.5 57.9 58.5 73.0	59.9 57.5 57.9 69.0	50-4 49-6,49-5,57-0	-2 41 -2 50 .0	9 26.7 28.2 26.0 40.0	8 15-9 15-8 15-3 39-0	2.2	in per
	tare	.м.ч 8	10	 5.3	6.6	- 3 6.8	-6.5	 99	3.5	-86.2 14.63	7.5	9-6	$-\frac{1.2}{4}$	6.5	- []	4.	of te
	Temperature.	.M. 4 2	 -	3.211	1 12.4	2.6	934.231.231	1.13	51.1 48.2	0.5	9.9	0.44	3 42 .6 41	$\frac{1}{6 \cdot 7^{2}}$	5.9	36.3 34.3	eans
	${ m Ter}$	M.A 8	 -	0·4 1 1	8.11	20.7	1.93	8.3	51.35	59.1	58.45	4	41.34	5.9	-8:4	34.13	he m
5-	-20	Month.		January 10.			&April	.gg 05				September		November.	December 14	Year.	*Note.—The

APPENDIX No. 2,

REPORT OF THE DIRECTOR OF THE MAGNETIC OBSERVATORY, TORONTO, FOR CALENDAR YEAR ENDED 31st DECEMBER, 1874.

MAGNETIC OBSERVATORY, TORONTO, CANADA, January, 1875.

To the Honorable the

Minister of Marine and Fisheries.

SIR,—As this is the first occasion on which I have been called on to report to the Department on the affairs of the Toronto Observatory, it will not be out of place to say

a few words in explanation of its origin and objects.

The Magnetic and Meteorological Observatory at Toronto was established, and has been since maintained, for the purpose of procuring materials to aid in the general advancement of two great objects of physical research—terrestrial magnetism and meteorology—and is one of the four Colonial observatories which were set in operation by the British Government in 1839, in compliance with a joint application made in 1838 by the Royal Society and the British Association for the advancement of science, an application which, in the same year, resulted in the equipment of a naval expedition for a magnetic survey of the high Southern latitudes. Of these four Colonial observatories, that at Hobart Town was placed under the management of the Admiralty, the director and observers being naval officers, while the other three, at the Cape of Good Hope, St. Helena, and Toronto, were under the Board of Ordnance, the directors and observers being officers and non-commissioned officers of the Royal Artillery, and Major, now General, Sir E. Sabine, R. A.* the Director-in-Chief.

Lieutenant Riddell, R.A., the first director of the Toronto Observatory, accompanied by three non-commissioned officers, Messrs. Johnston, Walker and Menzies, reached Canada in November, 1839, when, after examining various localities, he finally gave the preference to Toronto. In the spring and summer of 1840 the observatory and residences were erected on a lot of 21 acres granted by King's College (now Toronto University), on the condition that the building should not be appropriated to any other purpose than that of an observatory, and should revert to the College if the observatory should be discontinued. The several directors of the observatory, while it continued under Imperial control, were Lieut. Riddell, K.A., Lieut. Younghusband, R.A., and Lieut. J. H. Lefroy, R.A., now Governor of Bermuda; the latter officer having continued in charge from the autumn of 1844 until the withdrawal of the detachment of Royal Artillery in the spring of 1853, when an arrangement was effected between the Imperial and Canadian Governments, by which the former handed over the building and instruments to the Canadian authorities, on condition of their continuing the observations. The non-commissioned officers, Messrs. Walker, Menzies, and Steuart, whose services were temporarily granted by the Commander-in-Chief till they obtained their discharge from the army in 1853, carried on the duties of the observatory under the supervision of Professor Cherriman of University College, until the appointment of the present director in 1855. The original observatory was demolished in 1854, and was replaced by the present stone building in 1855. The staff of observers, when the observatory came into the hands of

^{*} In 1837 and 1838 magnetic observatories were established at Dublin and Greenwich, another at Makerstown, Scotland, at the cost of General Sir T. Brisbane; and four others at Simla, Singapore, Madras and Bombay, at the cost of the East India Company. Magnetic observatories had been in operation at an earlier date in Russia, France, Germany, and Italy.

the Canadian Government, consisted of Messrs. Walker, Menzies, and Steuart. Since the death of Mr. Walker in 1865, his place has been most ably filled by Mr. W. F. Davison. who had been employed for several years as a supernumerary. The general character of the objects of the institution having been stated, I shall now go more into detail.

MAGNETIC OBSERVATIONS.

The state of the magnetism at the place of observation is expressed, at any instant by the direction parallel to which the magnetism acts, and the intensity of the force. The direction is defined by two angles, namely, the declination (called by sailors variation), which is the angle between the plane of the astronomical meridian and the vertical plane in which the axis of the magnetic needle lies, and the dip, or inclination, which is the angle made by the axis of the needle with the horizontal plane. The numbers which express the intensity of the force, and the declination and dip which define its direction, are called the magnetic elements, a term used also to denote the horizontal and vertical components of the force, named, for brevity, the horizontal and vertical forces, while the force to distinguish it from its components is usually called the total force.

For determining the values of the elements above named, we have the following

apparatus :-

(1.) Declinometer and Azimuth circle for the declination.

(2.) Dip circle and needles for the dip or inclination.

(3.) Vibration and deflection instruments for the horizontal force.

The total force is commonly computed from the inclination and horizontal forces, but it may be found also by an independent instrument.

As the observations, for determining the absolute values of any one of the elements, occupy from one to several hours, they are not adapted for the detection of minute and rapid changes in those elements.

For this latter purpose instruments are employed termed Differential Magnetometers.

The differential instruments are the following:

- (1.) Differential declinometer which shows the difference the declination has undergone between two times of reading.
 - (2.) The Bifilar, for measuring changes of the horizontal force.(3.) Balance Magnetometer for changes of vertical force.

The changes in the dip and in the total force are derived from those of the two components; but the change in the dip is also known by another instrument, the induction inclinometer.

The differential declinometer, bifilar, and vertical force magnetometers, when read only by the eye, but with sufficient frequency, are adequate to reveal the existence and general character of many interesting and important facts; but it is impossible, without the aid of self-recording magnetometers, to ascertain the changes that take place between the ordinary hours of reading, and whose amount and times of occurrence should be exactly known in order that the connection between magnetical and other kinds of physical phenomena may be traced out.

The photographic self-recording magnetometers at Toronto resemble in their general character those in operation at Kew. It would be out of place to attempt here a full description of these instruments and their mode of action; it will be sufficient, therefore, to state that each instrument, by means of certain photographic appliances, traces out on prepared paper a curved line or trace, which gives at every instant the value of the corresponding element, in terms of the time.

I shall now give a short summary of some of the facts revealed in the science of magnetism, and work effected by this and other observatories.

(1.) The dependence on local solar time of the diurnal magnetic variations at all stations, and the approximate identity as to the epochs of maximum and minimum.

(2.) The contrariety in direction of the extreme deflection of the declination in opposite magnetic hemispheres.

- (3.) A semi-annual inequality in the diurnal variations of declination, depending on the Sun's position in the ecliptic, which is approximately the same at all stations.
- (4.) A small annual variation in the absolute total force at all stations, having a maximum when the earth is in perihelion, and a minimum when it is in aphelion.
- (5.) A decennial inequality in the amplitude of the diurnal variation of the several elements, independent of geographical position, and approximately coinciding in the periodic variation in the number of solar spots.
- (6.) The contemporaneous occurrence of magnetic disturbances at remotely distant stations.
- (7.) The detection and determination at several stations of the laws which regulate the diurnal and annual distribution of the disturbances of the several elements.
- (8.) The discovery of a decennial period in the annual amount of the disturbances coinciding with that of the solar spots.

(9.) The confirmation as regards other stations of the discovery made by Kreil on

the existence of a variation depending on the hour angle of the moon.

In addition to the foregoing results, in which the Toronto Observatory has taken a prominent part, there remains that special work of a fixed observatory, the work, not of a few years only, but of centuries, the determination of the absolute values of the magnetic elements, by which the present magnetic condition of the earth is defined, and the secular changes, by which we may arrive at the laws and the causes whereby the magnetic condition of one age passes gradually into that of another.

METEOROLOGICAL OBSERVATIONS.

The meteorological instruments hitherto and still in use, with the exception of the anemometer, are not adapted to give a continuous automatic record. They are, however, of a very excellent quality. The barometer is by Newman, and has an internal diameter of 506 inches. The standard thermometers are by Fastré, of Paris, and are graduated in

arbitrary divisions, the readings being converted into Fahrenheit scale by tables.

From observations taken at Toronto several years ago, at every hour through the day and night, for six consecutive years, tables were computed giving, for every fifth day in the year, the diurnal variations of temperature at every hour. The tables have been extensively used at other places as well as Toronto in the reduction of temperature observations; but, as there is reason to believe that the diurnal variations of later years have undergone considerable modifications, it becomes requisite to collect materials for new tables. This will commence shortly by means of photographic self-recording instruments which have recently arrived. The direction and velocity of the wind is obtained by a continuous self-recording process. The instrument, one by Robinson, of the earliest construction, has been at work since 1848, and is nearly worn out. It will be superseded soon by a very superior apparatus, similar to that in use at Kew, and at most observatories of any note.

In addition to the instruments named above, we have the following that were devised here:—

(1.) An electrical clock anemometer and wind vane.

(2.) Apparatus for showing the rain that falls in every hour.

(3.) Apparatus for showing the rainfall which accompanies different winds.

ASTRONOMICAL OBSERVATIONS.

The observatory is not furnished with apparatus suited for astronomical researches. Our astronomical observations are not made in the interests of astronomy, but are subservient to other purposes, and are almost entirely confined to transits for time.

The correct time determined at this establishment is necessary for our magnetic and meteorological observations; and it is also the standard by which all the clocks and watches in Ontario have been regulated for more than thirty years; and for more than three years the observatory has given time daily to the city by striking all the fire alarm bells at a fixed instant.

EXTRANEOUS WORK.

There are sundry services rendered by us to the public which add considerably to our work, and which, although they do not strictly form part of the duties of the observatory, are naturally associated with them. The following are some of the services referred to:—

a. Giving information on scientific subjects to visitors.

b. Supplying information in writing to applicants in Canada and other countries.

c. Examination of instruments brought for comparison.

But the operations under the title of extraneous work, which have occupied the most prominent place of late years, are those of the Meteorological Office, which originated at the Toronto Observatory, and have since been carried on to a great extent by the labors of its staff.

To the mechanical skill and ingenuity of Mr. Menzies, the senior observer, I am indebted for several contrivances by which the efficient fitting up of our numerous stations has been greatly facilitated, and a considerable saving effected; while it has been through the ability and indefatigable zeal with which Messrs. Steuart and Davison performed the computations and multifarious duties connected with the meteorological service, for nearly two years prior to July, 1871, when the first small grant of money was made for that purpose, that so rapid a progress has been since achieved.

PUBLICATION OF THE OBSERVATIONS.

As no pecuniary provision was ever made for the regular publication of the observations, I have been compelled to rely on such savings as I could accumulate from the annual income. By the proceeds of this saving I was enabled, in 1863-64, to print three volumes containing summaries of observations from 1853 to 1862, but the virtual diminution of the income by the sum of \$680 per annum, which commenced in 1865, has since rendered saving to any extent impracticable. A volume is now in the press containing a summary of the work at the observatory from the earliest times to the end of 1871. As soon as it has been completed, it will be followed by another containing the observations to the end of 1874; after which I trust that the practice will be followed of publishing annual volumes.

I enclose a summary of the expenses of the establishment in the year ending 30th June, 1874, amounting in all to \$4,816.10.

The above is respectfully submitted.

G. T. KINGSTON,

Director of Magnetic Observatory, Toronto.

MAGNETIC OBSERVATORY, TORONTO.

Amount of Expenditure during the Fiscal Year ended 30th June, 1874:-

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G. T. KINGSTON.

APPENDIX No. 3.

REPORT OF THE DIRECTOR OF THE OBSERVATORY AT KINGSTON, ONTARIO, FOR THE CALENDAR YEAR ENDED 31st DECEMBER, 1874.

KINGSTON, 28rd January, 1875.

The Honourable Albert J. Smith, Minister of Marine and Fisheries, Ottawa.

Sir,-I have the honour to transmit for your information the following report of the

Kingston observatory.

During the year ending 31st December 1874, the local time has been given to the City, and two free public lectures on Astronomy, and its useful applications were, in terms of the Deed by the corporation in favour of the observatory, delivered in the City Hall. Astronomical occurences of interest are observed, and the results recorded. Opportunity is given at all times to visit and inspect the building and instruments. \$13.30 has been paid during the past year to Messrs. Irving and Son for repairs on the outside of the building, and \$9 for expenses of refilling and adjusting the standard barometer.

The instruments, including the equatorial by Alvan Clarke, of $6\frac{1}{2}$ inches aperture, and the Beaufoy Transit, a loan from the Greenwich observatory, together with the Small Transit by Simms are all in good working order. A sidereal clock, with compensation pendulum, of remarkable accuracy, has been constructed by the observer himself and the mean time clock in the window, also of his construction, is regulated by it. It is exceedingly desirable, however, that a Standard Sidereal clock of the most perfect kind, for which a solid stone foundation as well as one for a Transit with three feet circle has been prepared, should be obtained as soon as the funds will permit.

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

JAS. WILLIAMSON,

Director.

APPENDIX No. 4.

REPORT ON THE MONTREAL OBSERVATORY FOR THE CALENDAR YEAR ENDED 31st DECEMBER, 1874.

To the Honourable

Montreal, 16th January 1875.

The Minister of Marine and Fisheries.

Sir,—I have the honour to transmit the following report of the McGill College Observatory at Montreal, which has been, since February 1st, 1874, under my charge.

From the commencement of the fiscal year, July 1st., 1873, until the death of Dr. Smallwood, in December, 1873, the meteorological observations taken under his care were as follows:—

I. Three daily observations of the several instruments taken synchronously with those of the telegraph system of Canada and the United States; the hours being 7:25 a.m., 4:25 a.m., and 10:50 p.m. Toronto time: 7:48 a.m., 4:48 a.m., and 11:13 p.m. Montreal time. These were reported to the Meteorological Office, Toronto, by telegraph immediately after the completion of each observation, and also by mail every week.

II. Three observations taken daily at 7 a.m., 2 p.m., and 9 p.m., Montreal local time,

which were reported by mail every month to the office at Toronto.

As these observations are collected for publication at the Toronto office it is needless to refer to them further here.

On my appointment to the charge of the Observatory by the Governors of McGill University, and also to the post of Metcorological Observer in connection with the Canadian system under the Department of Marine and Fisheries, I visited Toronto (at the expense of McGill College), and spent one week at the Meteorological Observatory there, to make myself acquainted with the system of observation practised in that establishment.

Soon after my return, Professor Kingston visited Montreal to aid me in the reorganization of meteorological arrangements here.

The unfitness of the site of the observatory for observations on the wind has frequently been pointed out, and this will be readily admitted when it is known that the vane and anemometer were distant only two thousand feet from the brow of Mount Royal, and below that point 500 feet, while the summit of the mountain is 550 feet above the Observatory. It is still further to be noted that the prevailing winds here are from the north and west, while the mountain would barely be included by the directions north and south-west from the observatory.

On examining the locality, in conjunction with Principal Dawson and Professor Kingston, it was determined that no good position for an anemometer existed within two miles of the college buildings, except on the top of the mountain, where Professor Kingston suggested that an anemometer should be mounted, to be connected by electricity with a recording apparatus at the observatory. As the season was unfavourable for the erection of an apparatus on the mountain, an anemometer and vane supplied from the Toronto office were put up as a temporary expedient on the cupola of McGill College.

The necessary preparations having been completed, observations at the three telegraph hours were commenced on January the 30th, (the messages being sent from the telegraph office, established at the college observatory, to Toronto) and have been since continued

without intermission.

So far the meteorological observations were confined to those proper to a reporting telegraph station.

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To fulfil the duties proper to a "chief station," on the first of August, in addition to the observations at the three telegraph hours, six observations more were commenced at times so chosen as to make up in conjunction with the morning and afternoon telegraph hours, a group of eight observations, separated by equal intervals of three hours. The times forming this group, expressed in Montreal time, is as follows:—1:48 a.m., 4:48 a.m., 7:48 a.m., (telegraph) 10:48 a.m., 1:4 p.m., 4:48 p.m., (telegraph) 7:48 p.m., 10:48 p.m. These, including also the telegraph observations, are taken daily.

The above named group of eight observations is published daily in one morning and

one evening city newspaper.

The purpose of the equi-distant observations is to collect materials for the construction of interpolating formulæ, whereby for the several elements, normals proper to every day and hour may be obtained, and thence corrections for diurnal and non-periodic variations. As stated in the report of the Meteorological Office, Toronto, under the head of "Chief Stations," "These corrections are required, in order that by their aid comparatively scanty observations made during short periods, at ordinary stations may be rendered comparable with those taken frequently, and for a long series of years. To obtain these normals with adequate precision, it will be necessary to continue the series for several years."

Reports of the six additional observations, as well as of those at the telegraph hours,

are furnished regularly by mail to Toronto.

Remarks on the Anemometer.

The anemometer on the cupola is termed a clock anemometer from the fact that the number of miles travelled by the wind is indicated by the motion of the hands of a common clock, which advance four minutes for every mile of wind. The shaft bearing the cups is connected by an eccentric and a vertical lever with the escapement wheel in such a manner that for each revolution of the cups the wheel is advanced one tooth, the length of the lever being regulated by the distance from the cups at which it may be convenient to place the clock. As elsewhere stated the position on the cupola was used as a temporary expedient; for although incomparably better than the roof of the observatory, it is altogether too much sheltered by the mountain. Access to it was also extremely inconvenient. No time, therefore, was lost in erecting on the mountain a post for the support of the anemometer and wind vane, and in connecting it by six wires with an indicating apparatus at the observatory, one of the wires being for the anemometer, four for the wind vane, and one common to both instruments. The miles passed over by the wind are indicated (as in the anemometer on the cupola) by the hands of a clock, the escapement wheel is acted on by an electro-magnet; and the direction of the wind can be known at any instant by making the necessary metallic contact. The anemometer and vane are connected with the same magnet. From the above statement it will be seen that the instruments are not self-recording. It was a great step in advance to expose the vane and anemometer on the summit of the mountain, and I trust that in the coming summer these arrangements will be still further improved by the employment of an electrical apparatus, which will furnish a continuous record of the direction and velocity of the wind through the day and night. The mountain anemometer and vane have been in use five months.

Magnetical Observations.

On May the 12th, leaving Mr. McLellan in charge of the telegraph observations, I made a second visit to Toronto, taking with me all the magnetical instruments, now the property of McGill College, for the purpose of comparing them with the instruments at the Magnetic Observatory, and in order that the values of certain constants, required for the reduction of the observations, might be determined.

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It is probable that observations will be commenced for the monthly determination of the magnetical elements as soon as suitable arrangements have been completed for mounting the instruments.

The following is a statement of the distribution of the yearly Government Grant of

\$500 to this observatory:—

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						\$500.00

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

C. H. McLEOD.

APPENDIX No. 5.

REPORT OF THE DIRECTOR OF THE OBSERVATORY AT QUEBEC FOR THE YEAR ENDED 31st DECEMBER, 1874.

OBSERVATORY, QUEBEC, December 31st, 1874.

SIR,—In submitting my annual report for the year ended December 31st, I have great pleasure in stating that the new observatory and house, were finished early in May and the instruments, clocks and books, removed from the citadel here.

The transit instrument is fixed between stone supports that stand on the solid rock, and nothing could be better in that respect. The clocks are also on stone supports, resting on the rock, so that if the house were shaken by a violent wind the clocks would still be immovable.

The observatory consists of a tower for the equatorial, with a revolving dome, a transit room, and a computing room, and also a room for pactography, and as I can go from my study to the observatory without going into the open air, it is very convenient; whereas before, when the instruments were in the citadel and I living nearly two miles away, observations could not be taken, that now are.

The equatorial has a clear aperture of eight inches, with a nine feet focus, and the object glass is very perfect, and observations of the planets, occultations of stars by the

moon, and Jupiters satellites can be well observed.

But the principal work of the equatorial which is of much consequence, consists in taking photographs of the sun's surface, from which the time of rotation and inclination of its axis may be determined. I was in hopes of being able to get some photographs of the sun, before and after the transit of Venus, but some brass work, that was stolen, and for which I had sent to the States, had not arrived. However, as it was cloudy I should not have been able to take photographs.

But highly interesting and useful as these observations are, still they are not to be compared to the importance, in a commercial point of view, of giving correct time to the

shipping.

A vast number of steam vessels, and sailing ships, come to Quebec, and depend on the dropping of the "ball," for rating their chronometers, and who have had "time" given to them for upwards of twenty years, with an accuracy that nothing more could be desired.

I was forcibly reminded, in the early part of the season, of the absolute necessity of correct "time," that may be relied on, being given to the shipping, and of the great value

they set upon it.

In consequence of dropping the "time ball" by electricity, which I do now from the New Observatory, the ball being still in the citadel, many mistakes were made, as there always must be in starting anything new, and there is always some difficulty at first. For instance, on one occasion, in consequence of some key being left open, I could not drop the ball, and it remained at the mast head for upwards of an hour. There was quite a commotion in the Lower Town. A fleet of merchant ships off Indian Cove, had to sail without getting the "time"; and still worse on another occasion, the ball was dropped too soon, by some cross current, and before the machinery was ready, the captains of steamers have come out all the way to my house for the "time."

I had the valuable assistance of Mr. Pope of the Montreal Telegraph Office, who assisted me in finding out the cause of failures, when precautions were taken to prevent their ever recurring again, and things went on very smoothly for some time, when to my horror

I saw the ball drop a minute too soon. I rushed off into town, had a notice put in the Chronicle, then went to the Telegraph Office, and expressed myself in very forcible language, saying how very disgraceful it was that these mistakes were allowed to occur. They expressed their astonishment and told me that it was wholly unaccountable. When I returned home I was told that one of my children, a little girl, went into my study with her doll, and told it that she was going to send a telegram, and on her closing the key, down went the ball. Well, that can never occur again, and so I am in hopes that all causes of error and failure are now found out, although I must remember that the failures at Greenwich are 3 per cent. I therefore shall give notice that if the ball should by accident be dropped at the wrong time, it will be immediately hoisted half mast, and kept there half an hour, so that no harm can be done by giving "wrong time," which otherwise might be the cause of loss of life and property.

Another very important duty of the observatory consists in getting the latitude and

longitude of the principal places of the Dominion.

The enormous expense, and the great time required to get the position of a place by triangulation, and the uncertainty of the result, even by the best surveyors, render this mode unsatisfactory. Several places determined by Captain Bayfield, were many seconds out, until I sent him my longitudes by electric telegraph, when he went over his work again, and got them to agree with mine.

The Crown Lands Department have asked me to determine the latitude and longitude of four places on the Ottawa, in order that they may define accurately the limits of

timber lands.

Before I got the longitude of Chicago, Collingwood, Windsor, Toronto, Ottawa, Montreal and Three Rivers, the map of Canada was anything but perfect. Captain Orletar, R.N., wished me to get the longitude of Cape Race and Cape Ray, and I think that they ought to be got, not that I think that they are much out; still it would be satisfactory to the nautical world to have those places fixed with a certainty, so that they could be relied upon.

Colonel Strange R.A. has mounted a gun, near the "time ball," in the citadel, and has had an extra vent bored, so that by dropping a weight, two friction tubes can be fired.

and the 12 o'clock gun fired to a second.

I forget the exact amount that Mr. De la Rue, of London, said that he saved, by having the correct time; but let us suppose that an establishment has one hundred workmen, and that in consequence of uncertainty of time 3 minutes was lost in commencing to work in the morning, and 3 minutes after dinner, and taking the number of working days of 10 hours, at 310, and also the average rate of pay at \$1.50, then the owner of that one establishment, would lose no less than \$465 dollars a year. Now consider the amount lost in a large town by not having "correct time." Well may we say that time is money. But besides this there is great luxury in having the time to a second. They have it in all the principal towns in England, and there is no reason that they should not have it in Canada. As I have the time to a tenth of a second, why not take advantage of it? By one click of the telegraph key, I could sent the exact time all over the Dominion.

As I find that I cannot pay the salaries and expenses of this establishment with the appropriation of \$2,400, I have asked the head of my Department to increase it to \$3,000 and I feel sure that the scientific and practical work performed by this observatory, will fully merit that moderate outlay.

I enclose a list of expenses.

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

E. D. ASHE, Commander Royal Navy.

WILLIAM SMITH, Ecq.,
Deputy Minister of Marine, &c.,
Ottawa.

APPENDIX No. 6.

REPORT OF THE DIRECTOR OF THE TIME BALL AT ST. JOHN, N. B., FOR THE CALENDAR YEAR ENDED 31st DECRMBER, 1874.

WM. SMITH, Esq.,
Deputy Minister of Marine & Fisheries.

SAINT JOHN, January 7th, 1875.

SIR,—I have the honour to report that the time ball on the top of the Custom House building has been during the past year regularly dropped each day at one o'clock, giving the true time for this longitude at that hour, by means of which ship masters and others interested in obtaining correct time have been afforded an opportunity of testing their chronometers and time pieces. I flatter myself from the care which I personally take inadjusting my instruments, and taking observations both solar and siderial, that I give as correct time as it is possible to obtain, which is certainly within one second.

I have the honour to be, Sir,
Your very obedient servant,
GEO. HUTCHINSON,
Director of Time Ball, St. John, N. B.

SUPPLEMENT No. 5

TO THE

ANNUAL REPORT.

BEING

APPENDICES

OF THE

FISHERIES BRANCH

OF THE

DEPARTMENT OF MARINE AND FISHERIES.

PRINTED BY ORDER OF PARLIAMENT.



OTTAWA

PRINTED BY 1. B. TAYLOR, 29, 31, & 33, BIDEAU STREET. 1875.

APPENDIX No. 3.

REPORT OF THE CRUISE OF THE GOVERNMENT SCHOONER, "LA CANADIENNE," IN THE RIVER AND GULF OF ST. LAWRENCE, FOR THE SEASON OF 1874, UNDER COMMAND OF N. LAVOIE, ESQ. FISHERY OFFICER.

To the Honorable A. J. SMITH,
Minister of Marine and Fisheries,
Ottawa.

L'Islet, 1st January, 1875.

SIR,—I have the honor to submit the following report of the cruise of the Government schooner La Canadienne, charged with the protection of the fisheries in the Gulf

and Lower St. Lawrence, during the past season.

Very seldom has the departure of La Canadienne been delayed so late as during the season of 1875, since it was only on the 21st of May that a start was made from Quebec. The frequent rains of the winter, followed by successive frosts, had so hardened the ice, that its thickness materially interfered with the opening of navigation. This delay caused a great loss to the shipping trade of the Port of Quebec, the River St. Lawrence being the great artery through which the greatest part of our imports and exports pass. The season of navigation which usually is open seven months or more, lasted last year only six. Every one will understand the amount of loss which a month's delay must entail at this season of the year when merchants are awaiting the arrival of the fleet to export their produce and replenish their stores in return with foreign goods. Added to this, several vessels were destroyed by the ice or so entangled in it that they were for some time unable to reach their destination. This state of things would seem to call for imperative action, either by providing some harbor of refuge accessible at all seasons of the year, or by building a new class of vessels on an improved system, which might enable them to resist the pressure of the ice and overcome its difficulties.

From the date of leaving Quebec, on the 21st May, to the date of our arrival at

Gaspé Basin, on the 4th June, the weather was variable and middling fair.

The first locality usually visited by La Canadienne in the spring is the Magdalen Islands, but owing to our late departure this season, I deemed it more expedient to push straight on to Gaspé where the salmon fishing was just beginning. Nothing special required our immediate presence at the Magdalen Islands. No foreign schooners repaired thither for herring fishing, being prevented by the floating ice from reaching there in time for the fishing.

La Conodienne was engaged over five months in her cruise this season, having returned to Quebec on the 3rd of November. During this space of time we visited Magdalen Islands twice, the North shore and the coast of Labrador three times, stopping each time at the Island of Anticosti, and paid a similar number of visits to Bay des Chaleurs. No accident of any kind befell us during the whole of that period, and the season was exceptionally fine from July until the fall. The several fishing stations in the limits of our division were repeatedly visited and the presence of the Government vessel insured everywhere order and compliance with the fishery laws.

I deem it a pleasure to be able to bear testimony to the spirit of order and tranquility which prevailed everywhere on our own coasts during the past season. Among so large a floating population composed of fishermen of different creeds and nationalities, there was no disturbance of the peace whatever. All worked in harmony, anxious to reap, with as little delay as possible, the rich harvest which a bountiful Providence places at their doors. It must also be added that fishermen now appreciate better the care and

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attention bestowed on their wants by the Department over which you preside. They fully realize that however vexatious the restrictions imposed upon the fishing industry may be thought in the beginning, these must in the end redound to their own profit. I hall touch more fully upon these points when speaking of the fi heries of each division n particular.

The time has now come when I must speak of our schooner. She is getting old, and numbers twenty-one years of faithful service along a most dangerous coast, during which she has experienced many heavy storms and much rough weather and one shipwreck. Every year she requires extensive repairs to fit her for a difficult service,—all of which impair her former efficiency; whilst the requirements of the fisheries protection service increase every year, and require the employment of a fast sailing and reliable vessel.

It has therefore become a matter of absolute necessity as well as of economy to replace La Canadienne by another vessel. She may still be advantageously used for some other service, such as placing buoys or as a light-ship, but her time is past as a fast, reliable cruiser.

The last accident to our rigging, etc., compelled us to return to Quebec for repairs in the midst of the fishing season, at a great loss of time and with injury to the service. The employment of a new vessel would obviate all this, whilst at the same time it would afford increased protection to the population of the North Shore and Magdalen Islands, which depends entirely upon the presence of a government cruiser for protection against enroachments by strangers, and as a surety against violence or depredation. Without such protection, the force of the strongest would become law, and the Government would have endless quarrels, robberies and perhaps murders to deplore. As to the best mode of replacing La Canadienne, I might suggest the employment of a steam vessel. arrangement will, I feel sure, be advantageous to all, both to the Government, the fishermen and the public. The population of the North Shore is slowly but steadily increasing, the service as formerly performed by La Canadienne is hardly sufficient to maintain order and compliance with the fishery laws amongst hundreds of fishermen unfortunately too much bent upon mischief; moreover the delays and uncertainty of a sailing vessel prevent our being at certain places at times when most wanted to repress disturbances, assist the local fishery overseers, or capture and punish offenders on the spot. The employment of a small steamer would obviate all these difficulties. We would then be enabled to visit the several parts of the coast at stated regular intervals, and at times when our presence would be most needed. The dates of our visits would be known to the Overseers, who would thus be sure of their actions, and the fact would materially enforce their authority.

Being fully persuaded of the importance of having additional security given to this part of Canada, the local Government of the Province of Quebec has decided upon sending a Stign diary Magistrate to these remote parts during the fishing season. But owing to the want of an armed force and the distance of prisons, most of his judgments remain a dead letter. The employment of a steamer by the Department would assist the Stipendiary Magistrate by enabling him to rely upon our presence and assistance for the carrying out of his decisions. During the time of my predecessors, as well as for the six years I have had command of her, La Canadienne has rendered good service in this connection, and more than once she was the means of bringing under the strong arm of justice, culprits who would otherwise have escaped a deserved punishment.

Taken as a whole, I do not consider that the employment of a steam vessel would cost much more than the present schooner does; whilst the service would be ten times more speedily and satisfactorily performed. The annual appropriation for *La Canadienne* is \$10,000. An additional \$2,000, would, I am sure, be ample to meet all the requirements of this new service.

With these remarks, which, I beg leave most respectfully to bring under your earnest notice, I shall proceed to review the work performed during the season.

FISHING BY FOREIGN SCHOONERS.

Fishing having been very successful last season on the shores of the United States, our coasts were visited by comparatively few American vessels, whilst not a single French schooner was noticed.

The present seems to be a fitting occasion to pay a tribute of thanks to the French Government for permitting Canada to fish on this part of the coast of Newfoundland reserved by treaty to France, the more so when we grant them no similar favor in return. Without such liberality our markets would have been bare of herring this year. No fewer than thirty schooners from Canada repaired this season to Port à la Croix, Newfoundland, where the French Commander gave them, in a most cordial manner, permission to fish. These schooners secured their cargoes in a very short time, and were thus enabled

to supply the Quebec market.

In addition to the responsible and important duties which the Government cruiser has to perform in connection with the enforcement of the fishery laws and the maintenance of order among our resident fishermen on the shores of the Gulf, there are still more difficult services to be attended to which require the absolute employment of an armed vessel. I allude to the protection of our more remote stations, such as those of the Magdalen Islands and Labrador, against encroachments and violence by the crews of American schooners. These localities, where perfect quiet prevails during the winter, assume in summer an aspect of activity which would fairly astonish the population of our large centres. The numerous vessels coming from all parts of New England, as well as from the Maritime Provinces, bring with them an entirely new class of population. Were the resident inhabitants left to their own resources, they would be frequently unable to repress the scenes of violence and disorder which too often occur. Even with the presence of an armed vessel, it is difficult at times to maintain order.

Before the repeal of the Reciprocity Treaty, the waters of the Gulf of St. Lawrence were annually visited by over 1,200 schooners from the United States and Maritime Ports. This number has decreased somewhat since the repeal of the treaty; but now that Americans enjoy an equal privilege to fish in these waters, a considerable increase in the number of vessels frequenting our shores may be expected. By dint of care and the utmost forbearance, we succeeded in controlling the foreign crews and maintaining order; but before the employment of an armed vessel for the protection of our fisheries, crowds of sailors would go ashore, violate the peace, destroy property, commit depredations, and otherwise act in a violent and outrageous manner. Schooners would cast anchor amongst our fishermen's nets, destroy them and drive off their owners, whilst the crews would fill the taverns, perpetrate all manner of violence, and compel our people to abandon their fishing in order to protect their property. Disorders of this kind are happily of rare occurrence since the employment of an armed vessel by the Government; but trouble will sometimes occur in spite of every precaution, proving most forcibly the necessity of our service, and the consequences which would inevitably result of its abandonment.

To avoid lengthy details and unnecessary repetition, I have placed under a joint heading my remarks on the agricultural and fishing resources of the counties of Gaspé and Bonaventure, a close resemblance existing between their products and the modes of fishing as carried on by their inhabitants. The three other divisions treated of in this report comprise the coast of Labrador, the Island of Anticosti and Magdalen Islands.

GASPE AND BONAVENTURE DIVISIONS

This division comprising about one third of the whole of the south shore of the Province of Quebec, extends from Cape Chatte to Restigouche, in Bay des Chalcurs. For years very little progress was made on this part of the coast, if we may judge from the slow increase of its population and the scant improvements made in agriculture. he wealth of its waters and the fertility of its soil should have given to this part of the country, a foremost place in the ranks of civilization and progress, but a series of deplorable circumstances have prevented the realization of these expectations, and up to ten or twelve

years ago the beautiful county of Gaspé has been nothing but a prey to the greedy avarice of certain successful fish merchants.

The coasts of this county were amongst the first parts of our country visited by French discoverers, and from the wealth of their waters did not fail to attract their immediate attention. Hardy fishermen from Brittany and Normandy opened fishing establishments especially at Paspebiac, Percé and Montlouis. If the early history of the coast of Gaspé is to be relied upon, it does not appear that these people made any permanent stay on our shores. They were in the habit of coming early in the spring and returning to France in the fall of the year, just as is now done by French fishermen on the coast of Newfoundland. Sometimes a guardian would be left to take charge of the fishing establishments during the winter. The slow progress of colonization during the period of French occupation may be thus accounted for. Besides this, the numerous and frequent raids made by England in the waters of the Gulf and Bay des Chaleurs were not precisely means of inducing these people to settle there. In order to protect themselves against repeated invasions, the French erected several forts at Gaspé and on Bay des Chaleurs, to which they could flee in case of need. After the conquest a long time elapsed before any new establishments appeared, and it was only when peace was firmly established, after the war of 1775, that a few Canadian, English, Irish and Scotch families settled on dif ferent parts of this coast to cultivate the land or engage in fishing pursuits. The former class of settlers was the least numerous, and this would account for the slow progress made. Had it been otherwise, we might at the present time notice a resident population living in comfortable and easy circumstances, instead of the state of dependency to which it is now subjected. The passion for fishing pursuits paralyzed everything and caused the Gaspé fisherman to remain in a quasi torpor from which he is only now beginning to awaken. It is a well established fact that, with very few exceptions, fishermen from Perce to Bonaventure, are as it were, slaves of certain Jersey firms, and that all their labors and hardships are endured only to increase the wealth of foreign merchants who, taking advantage of their ignorance and improvident habits, give nothing in return to these poor people who so largely contribute to their wealth.

It is true that, for some thirty years past, some improvement is noticeable in both the counties of Gaspe and Bonaventure; the population which numbered 10,000 souls in 1830, may have increased by 20,000 and reach a figure of 30,000 at the present date; a large number of hands are engaged in agricultural pursuits, whilst the farms are in a better state of cultivation; public roads are opened in several directions, affording new markets to farmers; telegraph lines and communication by steam will create a new era. but all these improvements have not been brought out by the rich and wealthy. otherwise; they notice these improvements with jealousy because they must inevitably cause competition, and thereby loosen the ties by which they control the poor fisherman. Agents of these wealthy firms have been known to speak in strong terms against education as leing a useless luxury for fishermen. Progress is felt here because of its superabundance everywhere else. It must not, however, be kept out of sight that the system of truck and the improvident habits of fishermen have much to do with their present state of dependancy and the slow progress of the coast of Gaspé. But how many of them have for years battled against the system of trade as carried on here, unable to rid themselves of the shackles by which they are tied? And how could it be otherwise when the exorbitant prices fishermen have to pay for the necessaries of life and fishing outfit, and the ridiculously low prices at which they are compelled to sell their fish are taken into consideration? This system has been in operation for the last hundered years and began at a period when the first chief of the present firm of Robin & Co. purchased the Seigniories of Paspebiac and Grand River. This man, who may be called a genius in his sphere, had foreseen that, in order to make his firm powerful, it was first requisite he should become master of the soil. The land was subsequently deeded in small fractions, ten acres at most. Settlers being unable to live on the produce of their farm, had as a consequence necessarily to resort to fishing. His followers continued to practice the same system and successive years tightened more and more securely the ties which bound the fishermen to the firm. Such has been the success of this powerful firm that, at the present date it owns about half the farms on the coast of Bay des Chaleurs from Percé to Bonaventure. It regulates the trade of the counties of Gaspé and Bonaventure, determines the price of fish and other goods, and in fact is a recognized authority in the trade and commerce of the district.

I should be sorry to have it understood that all the Jersey firms approve of this mode of dealing. Several agents have repeatedly told me they would be happy to introduce changes, but that they are afraid of incurring the displeasure of the Messrs. Robin, whose enormous wealth would ruin them in the end. The house of Robin & Co. appears also to have no sympathy with other firms of the same nationality. agent of a Jersey firm told me that the Messrs. Robin spent \$140,000 to prevent other firms from introducing their fish in a certain market where the Robins had hitherto held a monopoly. That firm being also the oldest, one is better known, and their fish can always command a couple of shillings more than that of other firms in the European market, the West Indies and Brazil, thus they can always give a higher figure for fish, but should any other firm attempt to raise the price, the consequence would be the firm of Robin & Co. would so much outbid them in their venture they would be inevitably ruined, a fact which has already occurred. It will therefore be easily understood how our Quebec traders cannot compete with them; fishermen being all indebted to these firms must sell them their fish, under penalty of being driven from their properties. Jersey merchants also import their own goods direct in their own vessels, and duties being light, they can, when necessity compels them to do so, sell cheaper than our traders, so that, one way or another this system of trade must be ruinous for fishermen. Under the subject of cod fishery I shall have occasion to return to this point.

In my report of last year, I took occasion to draw the attention of the Department to this unpatriotic system of trading; I spoke of it with a great deal of moderation and without being at all influenced by partiality or animosity, but merely with the intention of showing these people that the country was beginning to open its eyes to the anomaly of this mode of trading; a relic of a by-gone century. My remarks were taken in ver, bad part, especially by the firm of Robin & Co., and above all by its agent at Perce (Mr. Orange) who tried ineffectually to hire strangers and others to write against me to the head of the Department at Ottawa. Unable to succeed in this, a mean vengeance was planned, which consisted in refusing to supply the statistics annually used in the compilation of the Departmental returns. I had instructed the local fishery overseer at Gaspé Basin to apply as usual to the agent at Percé for these figures. He did so in a courteous and respectful note, but the blunt refusal given him is couched in such vulgar and unbecoming language, that, out of respect for myself and consideration for his employers, I do not feel at liberty to publish his answer in a public document. This reply is on record in your Department. I was under the impression that this firm, which derives a profit from half the fish caught in the Canadian waters of Bay des Chaleurs, should certainly have offered no objection to furnish such simple information. This last feature especially will, I trust, be sufficient to enable every one to understand what can be expected in business relations from the haughty bearing of these agents, and to what extremities the district of Gaspe would be driven were the march of progress dependent upon such

In spite of this state of things there has, however, been for several years past an improvement in the position of fishermen. Several of these understand the advantage of cultivating even a small strip of land, and thus being prepared for a failure in the cod fishery. Others, by listening to good advices, have succeeded in freeing themselves from their obligations to merchants, and abandoning the bad practice of taking advances on credit. They can now compel the agent to sell them his goods at a fair and reasonable price. Let us hope that, with the opening of Colonization roads, the inducements offered by the Government to the cultivasion of land, with increased facilities in communication, and additional competition in the markets, the inhabitants of Gaspé will soon be enabled to extricate themselves from their former shackles and develope the resources of that

district by their progress and industry. Besides the actual fishermen, who live exclusively by fishing, the inhabitants of the district of Gaspé generally have had a successful season. Crops were more abundant than ever, and joined to this happy state of things the saw mills of Mr. Vachon at Magdalen River, which give employment to 300 men, those of Messrs. Lowndes at Gaspé Basin, and of Messrs. King at Pabos, where 80 hands are employed, the several lobster and salmon canning establishments at Gaspé Basin, Maria and Carleton, have proved a godsend to the inhabitants of these localities who, in addition to a convenient market for their produce, find steady work, remunerative wages and immediate cash payment. Every one feels the good of these establishments since they went into operation. With all these advantages placed together, the approach, of a long winter has nothing to frighten the residents. And if even a time comes (and it must come) when settlers shall look upon fishing only as a secondary occupation, then it will become a regular trade which will ensure additional comfort and compel merchants to deal liberally with those engaged in its pursuit.

The harbor of Gaspe was visited during the season of salmon fly fishing by an American yacht, owned by Mr. Stuyvesant, of New York. She was one of the neatest models it was ever my lot to see. The number of steamers and vessels frequenting Gaspe Basin was smaller this season than usual. The same remark applies to the number of tourists and strangers. The want of a good hotel in 1872 and 1873 must account for this falling off. A first class establishment is, however, promised for next season; and should this promise be realized, I have no doubt that the natural attractions of Gaspé, added to a reduction in the rates of passage will induce a larger

number than usual to visit its shores.

With the exception of a few quarrels of a private nature, order and peace uniformly prevailed on the whole Gaspé coast from Cape Chatte to Restigouche.

Herring Fishery.

Herring being the first fish to make its appearance on the coast of Gaspé in the spring, I give it a foremost place in these remarks. Formerly, when barrels were cheap and salt easily procured from merchants, this fishery possessed great importance among Bay des Chaleurs fishermen, and thousands of barrels were yearly exported to the Quebec markets and United States, especially during the existence of the Reciprocity Treaty. At its expiry, this trade ceased: the increase in the price of salt and barrels having besides tended to render it very uncertain. An Irish firm in Sligo (Petry & Co.) then carried on this business for a few years on a large scale, to the great benefit of the inhabitants of Bay des Chaleurs, who do not enjoy, like those on the east coast, the advantage of cod fishing. That firm sent their fish to Ireland and Norway, but a keen competition in these markets compelled them to abandon their establishments in Bay des Chaleurs, and remove to Bay of Islands, on the coast of Newfoundland, where fish are larger and of a more ready sale in foreign markets. On account of this total absence of a market for Bay des Chaleurs herring, none are caught except for local consumption. A few barrels are sent to Quebec, where they realize from \$2.50 to \$3. A small quantity is also used for manuring purposes. This fish is sometimes employed as bait for cod when capelin and launce are not to be had.

Herring was very abundant this spring in Bay des Chaleurs, on the Gaspé coast, and in the river St. Lawrence even as high up as Malbaie, where it had not been seen for years pas. It is presumed these fish had been driven there by south-east winds, which prevailed during the whole of the spring. Port Daniel, Cascapedia, Bonaventure and Carleton being the localities most frequented by these fish for spawning purposes, also yielded abundantly. Hundreds of barrels of herring spawn were washed ashore at Port Daniel, whilst it is reckoned that three hundred barrels were used at Carleton for manuring purposes. Disappearing from these localities during the summer, it was still abundant in other places of Bay des Chaleurs, at Ste. Anne des Monts and Montlouis. The statistics, however, exhibit a falling off in the catch of this season compared with

'ast year, but this is due to a decrease in the number of fishermen engaged in this pursuit, and, as already stated, to the absence of a market. Besides pickled herring, 1,390 boxes were smoked, the whole of which is mostly used for local consumption.

Cod Fishery.

Although the cultivation of the land has made great progress in past years, and part of the inhabitants of Gaspé are employed by lumbering firms or engaged in fishing for salmon or lobsters, cod fishing is still the pursuit which employs the most labor from Cape Chatte to Bonaventure. It is also the business wherein the greatest amount of capital in engaged, and in which the largest profits are realized. Without reckoning the number of hands employed at the several fishing establishments and upon the vessels engaged in that trade, no fewer than 2,732 men and 1,327 boats were occupied during the whole summer fishing for cod on the shores of this division. These statistics exhibit a decrease upon the figures of last year, but this is accounted for by the heavy storms of the 24th August, 1873, and 18th June, 1874, which twice destroyed the barges at Percé, Point St. Peter and other places.

Mention was made in previous reports of the banks where cod is most abundant. These spots are not, however, always equally favoured, the presence of cod as well as of other fish being materially influenced by several causes, most of which are still unexplained, the principal being contrary winds, the state of the temperature, and above all the migration of food. In years past cod used to be fished for as high up as Rimouski; six years ago large establishments were seen at Matane, where there are none now. Ste. Anne des Monts and Cape Chatte were, in 1871 and 1872, the best fishing spots on the cost of Gaspé; yet this year the catch utterly failed. But the places where cod delight to visit every year, and where it remains until the month of December and perhaps during the whole year, are the banks adjoining Capes Gaspé and Perce and those of Miscou and Orphans, from twenty to twenty-five miles distant from the main land.

Although the Gaspé coasts from Cape des Rosiers to Montlouis and those of Bay des Chaleurs, from Pabos to Bonaventure, are not considered equal to those of Perce; the

best fishing was made there this year.

Cod fishing began this spring under most encouraging prospects. At the date of our visit to Perce, about the 7th June, boats had as much fish as last year in July. However, a terible storm which prevailed for three days about the 18th of June, and destroyed all the fishing boats of Perce and most of those of Cape Cove, so changed the direction of the fish that fishermen after having, with great trouble and expense, procured new boats, could catch but a few fish during the remainder of the season. Apart from those places, cod fishing was generally good from Cape Rosiers to Montlouis, and from Grand River to Bonaventure. Fish were also larger than usual, and in consequence brought a higher price. The average catch on the coast of Gaspé amounted to 75 quintals, and 60 at Paspebiac and Bonaventure, which may be reckoned as good summer fishing, when it is taken into consideration that most of the men have farms and that part of their time is employed in agriculture. Fishermen from Grand River, Pabos and Newport were the most successful, some of their boats having caught as many as 200 quintals of fish. These people, however, mostly repair to the banks of Miscou and Orphans, in order to insure full loads.

The above will show that, had it not been for the June storm which destroyed so many fishing boats built to replace those lost under similar circumstances in 1873, and if the fall fishing had been equal to the summer fishery, this year's catch would have been an extraordinary one. Bait which had been abundant at Perce until August, unfortunately failed all at once, and with the want of bait fish disappeared. The men worked with energy, doubled their voyages, but all in vain. Fish were noticed on the banks especially those of Miscou and Orphans, but no bait could be found, and fishing became so utterly poor that a merchant who employed two boats constantly fishing night and day, during six weeks time, succeeded in securing only four quintals of cod. Three-fourths of

the fishermen met with the same discouraging results. This will undoubtedly place many of these poor people in a most helpless position, and cause them great apprehension for the coming winter.

According to a prevailing custom in Gaspé, the fish caught during the summer is given to the merchant either in a raw state or prepared without any price being then fixed upon in payment of advances made or on account of old debts. The fall fishing generally goes to procuring provisions for the winter, so that the most successful fishermen were no better off this fall than others. Had it not been for an abundant harvest, distress would have been great during the winter on the coast of Gaspé. This ill success will also have the effect of keeping fishermen in debt with the merchants and tightening the bond which actually bind them. The above remarks will apply more forcibly to fishermen from Perce who, for two years running, have had the misfortune of losing their fishing boats, and who have to replace them at a cost of from eighty to a hundred dollars, old or new. What then can be the effect of a catch of seventy-five quintals of fish when half of it goes to the merchant, and the other half has to be divided between two men who made the fishing? Merchants buy the dry cod from those who work it, or else they take it fresh from the boats or in drafts; but in these cases they reckon one quintal out of two to make dry cod of it, and fourteen pounds beside to compensate the loss in weight by salt water, so that in every instance fishermen must be the losers. During an exceptional year like the present one, when cod was scarce and quoted at a high price in our home markets as well as in foreign ones, it was naturally expected that merchants would see the fitting occasion to give fishermen a value commensurate with their work and labors, or at least proportionate to the price of their goods. no; the occasion was a rare one to tighten the screw, and to secure for years to come the labor of our fishermen. The powerful firm of Robin & Co., which reigns supreme in the district of Gaspé, did not miss such an occasion. Its calculations were made, and it was decided that sixteen shillings was sufficient to pay for a quintal of cod which was worth this fall in Quebec thirty five shillings. The price was indeed raised to seventeen shillings in the fall, but there were no more fish. When the rate is fixed by the Messrs. Robin & Co., other firms dare not offer advanced prices, for fear of a competition which would ruin them. Let us admire the conduct of these merchants; they receive the fish during the whole summer without making any price with the men, who in turn trust to their honesty and generosity; and when they have secured mostly all the cod, prices are then determined upon. The value of goods in our cities and villages is usually rated according to the demand, scarcity or consumption, and every one can profit by a rise in prices to sell his produce, but here, the wealthy merchant alone can profit by these changes; the precept of "Live and let live" being unknown. Should, however, a rise take place in the fish markets, merchants will not fail to raise the price of their goods accordingly. Last fall, for instance, tea which sold for forty cents in Quebcc was worth eighty at Perce; molasses, ninety cents; butter from fifty to sixty cents; fishing boots, \$8, and so on. Every one will easily understand from these figures, which are nothing but the plain truth, how difficult it is for a fisherman to free himself when once he has had the misfortune to fall into the hands of Jersey merchants.

I have already said that cod fishing was carried on in two ways, either with hand lines or with trawls or bottom lines. From Grand Greve to Port Daniel, the latter mode is mostly used. It is also practised by Americans fishing on the banks. It is superior to the former manner, inasmuch as lines may be let alone during the night and stormy weather, and that larger fish are thus caught.

Bait, which is of primary importance in this fishing, and the greater or smaller abundance of which determines its success, comprises mostly all the fish smaller than cod. Early in the spring herring is used, and during the month of June, capelin; later in the season fall herring and squid are the best baits. Smelts are also sometimes employed; and when all these fail, recourse is had to clams.

Paspebiac and Gaspé Basin being the safest harbors of that coast, receive most of the fish caught thereon and part of the north shore, from whence it is shipped to foreign countries. From 20,000 to 30,000 quintals of dry cod usually remained every year in the stores, but not a single quintal was left last fall. The total catch of this division was 79,652 quintals, against 95,148 in 1873.

God Roes.

Another industry connected with the cod fishery was carried on for three or four years at Gaspe, and is now nearly abandoned; I allude to the preparation of cod-fish roes, which might double the fisherman's profits with about the same amount of labour. One hundred and thirty-eight barrels only were pickled this year. On the coast of Newfoundland, these roes have a great value, and as much care is taken to cure them as the fish itself. They are sent to France and Norway to be used as bait in the sardine fishery. The annual value of cod roes used in France alone is estimated at £80,000. Thirteen thousand boats are engaged in the sardine fishery, and over ten million tins are yearly exported from the coasts of Brittany to other countries. The above will show the importance of this trade, and what a source of revenue it yields to Newfoundland fishermen, in which profits our own fishermen could easily share, if they chose to do so.

RETURN OF VESSLLS engaged in the Fish Trade which took cargoes at Gaspé, Perce and Paspebiac, in 1874.

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Whence Bound,	4 Barbadoes 6 do 6 do 8 Rio Janeiro 7 Barbadoes 7 Barbadoes 6 Vienna 2 do 6 Jersey 9 Boston, U.S. 6 Denerara 6 Denerara 7 Holland, U.S. 6 Denerara 7 Horland, U.S. 8 Jersey 8 Jersey 9 Bio Janeiro 1 do 1 do 2 Jersey 8 Bio Janeiro 1 do 2 Jersey 8 Jersey 9 Rio Janeiro 1 do 2 Berbadoes 8 Jersey 8 Jersey 7 Demerara 4 Jersey 6 Rio Janeiro 8 Naples 7 Demerara 4 Jersey 6 Rio Janeiro 8 Rio Janeiro 8 Rio Janeiro 9 Rio Janeiro 8 Rio Janeiro 9 Rio Janeiro 8 Rio Janeiro 9 Rio Janeiro 8 Rio Janeiro 9 Rio Janeiro 8 Rio Janeiro 9 Rio Janeiro 8 Rio Janeiro 9 Rio Janeiro 8 Rio Janeiro 8 Rio Janeiro 9 Rio Janeiro 8 Rio Janeiro 9 Rio Janeiro 9 Rio Janeiro 9 Rio Janeiro 9 Rio Janeiro 9 Rio Janeiro 9 Rio Janeiro 9 Rio Janeiro 9 Rio Janeiro 9 Rio Janeiro
Men.	400rr0r5400r400H0H400H0000r400
Tons.	123 123 123 123 123 123 123 123 123 123
Name of Vessel.	Annabella St. Hubert Century Robin SS Diton Arrel Horel Union C D. Sar Providence Hematope Ranger Providence Ranger C R C Providence Ranger C R C Providence Homely Sacondine C R C Providence Homely Softence Homely Robin Maric Georgiana Sea Flower Hematope Homely SS Hower Hematope
Date of Report,	812542484845448688865488
No.	14 \$4\$

12

RETURN of all Ships and Vessels that have Entered Inwards coastways, Season 1874.

	Cod Tongues, in barrels.	::::::::::::::::::::::::::::::::::::::
Ì	Cod Roes, in barrels,	
	Маскете], in баттеlв.	
	Salmon, Pickled, in barrels.	લ્સ લ્યા
	Herring, Smoked in boxes.	
Season 1874	Haddock, in quintals.	20 394 494 494
rson	Oysters, in barrels,	ω Η Η Α
Ne.	Figh, Pickled, in barrels.	88 44 18 18
ways,	Salmon, Preserved, in boxes,	952
s coastways,	Cod Oil, in gallons.	40 40 943 943 514 1,290 1,290 1,466 2,021 1,227 1,227 1,227
Inwards	Herring, in barrela.	389
	Dry Codfish, in quintals	650 169 160 160 160 160 160 160 160 170 170 170 170 190 190 190 190 190 190 190 190 190 19
Ent	Мер.	81 82 84 84 84 84 84 84 84 84 84 84 84 84 84
at nave	Tons.	2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2
and Vessels that have Entered	and whence.	Tracadie Arichat. do Halifax Caraquet Perce. Campbellton Campbellton Campbellton Thunder River Caraquet Arichat. Perce. Caraquet Caraquet Caraquet Caraquet Caraquet Caraquet Caraquet Caraquet Caraquet Caraquet Caraquet Caraquet Caraquet Caraquet Caraquet Caraquet Arichat. Caraquet Caraquet Caraquet Caraquet Arichat. Caraquet Arichat. Caraquet Arichat. Caraquet Arichat. Caraquet Arichat. Caraquet Arichat. Caraquet Arichat. Caraquet Arichat. Caraquet Arichat. Caraquet Arichat. Caraquet Arichat. Caraquet Arichat. Caraquet Arichat. Caraquet Arichat. Caraquet Caraquet Arichat. Caraquet Arichat. Caraquet Caraquet Caraquet Arichat.
KETURN of all Ships	Name of Ship and whence	Bride. Softwaria Ant Ariel Ariel Adelina Glener. Providence. Northern Chief Gleaner. Northern Chief Gleaner. Northern Chief Gleaner. Northern Chief Hare Fregalia Glener. Northern Chief Northern Chief Northern Chief Glener. Hare Commander. Northern Chief Marie Georgiana Replevin Replevin Chion Fregeler. Glene
KE	. Date of Report,	6 98 9 7 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	1	May Jule Aug. Sept. Sept.
	R _o .	\$45°\$\$\$7488888443445255778838788

13

RETURN of all Ships and Vessels that have entered out Coastways, with Fish only, Season 1874.

No.	Date of Report.	Name of Vessel.	Whence.	Tons.	Men.	Dry Codfish in Quintals.	Herring in Barrels.	Cod Oil in Gallons.	Fish Pickled in Barrels.	Haddock in Quintals.
32 38 50 53 54	June 5th	Reaper	Gaspé	21 50 59 44 65 118	3 7 8 3 4 4 3 5 7 6 5	904 585 650 1,210 3,386		1,162 4,847	63 62 200 325	20 46

Whale Fishery.

The comparative success achieved by outfitters engaged in the pursuit of Whale Fishing during the course of last year tempted another venture this season. Three schooners went to the Gulf for this purpose. The Zephyr, Capt. Tripp, with a crew of seventeen men, returned with a load of 350 barrels of oil. The Violet, Capt. Suddard, with the same crew, 65 barrels; and the Lord Douglas, same crew, 65 barrels also. In all, 480 barrels; so that the first schooner took nearly three times as much as both the other vessels. The two last named schooners returned with 355 barrels of whale oil in 1873. Most of the whales were killed in the north-west portion of the gulf, from Natashquan to Thunder River. The poor success of the present and past years and the small number of whales noticed in the waters of the gulf, had led to an apprehension of their disappearance, but they returned this year in such numerous herds that I counted one day as many as thirty-six towards the west point of Anticosti, and the lighthouse keeper at Point des Monts states that whales were more numerous than ever in that neighbourhood early in the spring. The schooners of Capts. Suddard and Baker would have done as well as Capt. Tripp's, had they succeeded in securing all the whales they harpooned; most of them were unfortunately lost, and with them the profits of the season.

In spite of these successive failures our fishermen encouraged by the re-appearance of whales in our waters find their hopes renewed and appear more than ever disposed to engage in this fishery. Those who have abandoned it would gladly resume the pursuit, should continuance of the presence of whales encourage them to do so. It is much to be desired that an industry which formerly afforded such an abundant return on the coasts of Gaspé should resume its importance; and I feel sure that, taught by successive years of failure and adversity, our people would not now squander any profits arising from it.

The produce of the whale fishery amounted this year to \$9,000.

Salmon Fishery.

If this fishery, considered under the light of revenue, has not the same importance as others which are pursued on the coast of Gaspé, it nevertheless is worthy of the greatest care and attention both on account of the enjoyment it affords to those who can follow it. as well as for the new modes of keeping this fish in a fresh state by which our population can procure it at all seasons of the year at a comparatively reduced price. which formerly was so abundant on our coasts and in our rivers, had been almost destroyed by excessive and illegitimate fishing, when the fishery laws, passed in 1859, were so opportunely put in force, much at first, it must be confessed, against the wish of the ignorant who now appreciate the utility of legal enactments by which the most astonishing results have been obtained. The enforcement of these regulations was certainly not obtained without great efforts and ceaseless attention on the part of fishery officers, considering the large extent of our coasts; but the system is now so well organized that it is almost impossible for violators of it to escape. The improvement noticed in our rivers is wonderful, but this improvement has been especially noticeable for the past seven or eight years, under the complete organization of protection. In 1865 the yield of the County of Gaspé amounted to 217 barrels, and in 1867 to 414 barrels. County of Bonaventure the yield for 1865 was 299 barrels; 434 in 1856, and 536 in 1867. In 1873, 742 barrels were caught in the County of Gaspe, and 692 in Bonaventure. In 1870 both counties yielded 1,599 barrels, without reckoning the fish caught with the fly. Since 1869 fishery overseers in both counties agree in saying that the pools are annually filled with breeding fish, especially in the rivers of the divisions of Gaspé, Cascapedia and Restigouche. This improvement in the state of our breeding rivers, led every one to expect years of abundance, and to say the truth, our fishermen have generally been well remunerated for their labours and ventures since 1869. Of course each successive season cannot be equally good and some allowance must bemade for vrrious causes of failure. From what had been ascertained on the state of our rivers in the fall of 1873, every one relied upon an extraordinary fishing season this year, but the prevalence of cold weather, heavy winds and storms which destroyed part of the nets, have occasioned a relative decrease in the eatch. Taking, however, these facts in consideration, and the loss of eight or ten days during the best fishing time, a great improvement is noticed, as the catch amounted to 1,177 barrels for both counties: 576 in Gaspé, and 6,101 in Bonaventure. No doubt it might have been better, but what is delayed is not lost. The spawning beds must have been benefited by the number of salmon which escaped the nets and they will return a hundred fold what has been lost in a previous season.

I am pleased to see the opening of Fish Breeding Establishments at Gaspé Basin and Restigouche, by which means the improvement of the salmon fishery on our coasts and rivers will be so powerfully assisted, and I cannot too strongly recommend a similar enterprise on the Grand Cascapedia River. The marked success achieved at the Restigouche establishment should be a further reason for benefiting such an important portion of Bay des Chaleurs with another establishment of this kind. The fish breeding operations of last year in my division forming part of special reports by the several officers in

charge, I do not deem it necessary to say anything further on this point.

I might, however, be allowed to suggest the fitting out by lessees of the principal angling streams on Bay des Chaleurs as well as on the north shore, of breeding houses on a limited scale and at private cost. These would on the whole amount to an almost insignificant sum, the private guardians which each lessee has to provide to take care of his river might in a short time be taught the process and the forturate possessor of a salmon stream would be enabled to rely on a safe and constant supply by turning out every spring thousands of salmon fry in his river which in a few years would afford him increased sport. I throw out this suggestion for the consideration of our spirited anglers, certain as I am that it will draw their favorable attention.

Salmon fishing is not considered a deep sea fishery, although stations are located on the sea coast, but most of them are near the mouths of rivers. It is practised with nets and by angling; the fish used for trade purposes being all caught with nets. Salmon caught with the fly are mostly distributed among friends or given to the settlers. As already remarked, the severity of the weather influenced the salmon fishery. In sheltered localities, as Restigouche and Carleton, no decrease was felt, but it was very noticeable elsewhere, especially in the county of Gaspé. Fly fishing was excellent almost everywhere, although it began later than usual. From Cape Chatte to Cape des Rosiers, 147 barrels were caught in 1873; this year only 83 barrels. Angling in Ste. Anne des Monts River exceeded the catch of all previous seasons. This stream yielded eight salmon in 1871; 13 in 1872; 87 in 1873; and 140 in 1874; and the local fishery overseer reports the pools filled with breeding fish as high up as forty-five miles inland.

A case of salmon spearing occurred in that river. The guilty party is still awaiting his punishment, but it will be meted to him in proper season. Before the year 1870 poachers were masters in Ste. Anne des Monts River, and every one can understand the havor committed by consulting the figures given above. This time is happily over, owing to the effective guardianship exercised on that stream. The fishery overseer reports a large increase of trout in Cape Chatte River, but very little in salmon. From information received about Magdalen River, I am led to believe there is a good stock of breeding fish in it, but cases of spearing are reported. This river is leased by Mr. Ross who has a large lumbering establishment at its mouth, but his partner, Mr. Vachon, is so much engaged with business that the protection of that stream must become quite a secondary consideration to him, and as all peachers have an interest in hiding and protecting each other, I have been unable up to the present time to detect any of them. is the reason why I would bring the importance of that stream under the immediate attention of the Department as a nursery for adjoining stations on that coast, and would recommend the appointment of a local fishery overseer to better protect the breeding fish and prevent violations of the law. Besides, as I find it difficult every year to procure the fishery statistics of this part of the coast, having to pay resident lishermen to perform this service, I consider that this arrangement would be economical, whilst at the same time it would materially advance the protection of our fisheries.

The yield of salmon fishing in the division of Gaspé amounted this year to 416 barrels and 112 for the division of Malbaie; altogether 528 barrels.

The rivers of this division were visited by numerous anglers, and amongst others by His Excellency the Governor General and Lady Dufferin, who, I am informed, expressed themselves much pleased with the result of their visit.

Our fishery overseers give the most encouraging reports on the state of the breeding

pools in the rivers of Gaspe.

I had occasion last year to recommend to the Department the repeal of the Fishery Regulation of 28th September, 1868, which allows salmon net fishermen setting outside of three miles of the mouths of rivers, to fish on Sundays, and I was pleased to notice that my recommendation had been acted upon. This permission which, in the first instance was intended to apply only to stations on the sea coast, where fishing is difficult at all times, and where fishermen find it sometimes impossible to comply with the law by raising their nets on Saturdays was, without much forethought, extended to salmon fishing stations on the coasts of Gaspé Bay. Had not this timely recommendation been promptly carried out, serious consequences might have resulted, owing to the increase of salmon stations on Gaspé Bay. The waters of this bay must certainly not be considered with regard to salmon fishing in the same light as other parts of the sea coast. They are frequented in the spring by all kinds of small fish resorting there for breeding purposes; salmon feed upon these fish and stay a certain length of time before proceeding to the rivers for spawning. They are therefore caught in these outside nets long before they reach the estuaries of rivers, and for this reason the nets set outside are more injurious, comparatively speaking, than those set inside. Now that this regulation has been rescinded, there will be equal justice and more protection afforded to our rivers.

Among the various causes which Mr. Samuel Wilmot, in his report of last year, alludes to as most destructive to salmon eggs, I notice that he speaks of the kind of birds which prey on them. Among these may be mentioned the fresh water sheldrake and cormorants. The first-named variety inhabits the upper parts of rivers, where it produces from 10 to 15 young ones annually, which feed on salmon eggs. Three broods of these birds were counted this summer in York and Dartmouth rivers only. Cormorants come from the sea and visit Gaspé rivers about the end of August and during the month of September, on the look out for young salmon. Two of these birds which were killed last fall had no fewer than twelve or thirteen salmon twelve months old in their stomachs. It will thus be understood that great havoe is committed in this manner, and it might

perhaps be found proper to offer some reward for the destruction of these birds,

Most of the Gaspé salmon is sold fresh at seven cents a pound, and sent to Quebec packed in snow. Messrs. Holliday and Eden are the principal purchasers of fish.

Only one infraction of the law occurred last year in the Gaspé Division, the offender

being fined \$2.

The number of salmon fishery stations in the divisions of Gaspé and Malbaic is one hundred, and the revenue realized therefrom in the shape of license fees amounts only to the ridiculously low figure of \$334. Having had occasion in a previous report to speak at length upon this point, I shall only mention this fact to show the unfairness of the existing system. It is true that, since my tenure of office, the Department has exacted a fixed rate of one dollar per barrel of salmon caught on all new stations; but in fairness and equity, this rate should be extended to all stands, old as well as new ones. This is the only plan which will give general satisfaction, whilst it will be a small contribution on the part of net fishermen towards the expenses incurred by the Government and the public for the protection of our salmon fishery.

Complaints having been made that eel spearing in Barachois River was made a pretence for the poaching of salmon, this stream was closely guarded during last season, and no violations of the law were reported. It has never been noted for the number of salmon frequenting it, and is moreover a late river. During the month of October not more than a couple of hundred fish were counted in it; part of these were secured for the

purpose of procuring spawn for the Gaspé Fish Breeding Establishment.

An increase of eleven barrels of salmon is noticed in the Pabos Division over the catch of 1873. The nets at the mouth of Grand River yielded 21 barrels instead of 12 last year, and the lessee of the fly fishing division secured 240 fish. This remarkable increase leads me to consider that the decision arrived at of permitting cod fishermen at the mouth of this river and adjoining streams to throw the offals of the fish in the water instead of burying them, as formerly, underneath the stages, is a correct one; and to this change do I unhesitatingly attribute the marked improvement in the salmon fishery. Pabos River was visited by a couple of anglers who merely fished a few days. Both that stream and Grand River are, however, well stocked with breeding fish. At the date of my last visit to that locality, I was informed that cases of spearing had occurred in Palos River: but in spite of active researches, I could find no clue to the guilty parties. This division seems to be the last one in which peaching is practised. It might, however, be easy to put an effectual stop to it, on account of the facility of communication, were ordinary care and attention given to the guardianship of rivers. Whilst fully acknowledging the intelligence and qualifications of the present overseer, I apprehend that his numerous daily occupations encroach too much upon his liberty and time to enable him to properly attend to his duties, and sooner than see the division under his charge fall behind others in the way of progress, he would rather see his place filled up by another who could devote more time to the work of fishery overseer.

In Port Daniel division, the storm which prevailed on the 18th, 19th and 20th June, carried away most of the nets during the best time of fishing, and therefore caused a decrease in the catch; the yield, however, amounted to 112 barrels, a decrease of seven barrels since 1873.

The shores of Maria being particularly exposed to south-east winds, suffered most from last spring's storm; a decrease of eighty barrels is therefore noticed over last year's catch. It must, however, be taken into consideration that the season of 1873 was an extraordinary one, surpassing that of the previous year by 33 barrels.

The difference in the division of Cascapedia amounted only to 15 barrels; the yield

in 1874 being 30,567 lbs. against 35,363 in 1873.

Four hundred and five salmon were caught with the fly in the Grand Cascapedia River; the largest fish weighing 48½ lbs. Bonaventure River yielded only eight fish, but it was angled only during two days in June. The improvement in this stream has been slow, but the disappearance of nets in the estuary leads us now to expect a change. Only three salmon were caught with the fly in Little Cascapedia River, and the overseer reports very few fish on the spawning beds. Since the granting of new stands at the mouth of this river a gradual decrease has been noticed in the catch, and I am pleased to see the Department has adopted the suggestion I made to remove two of the stations nearest to the mouth of this river.

There were two prosecutions brought in this division for violations of the fishery laws; one against a party having set nets without license, and another against a licensed fisherman who barred the channel of Bonaventure River. Both parties were fined and had their nets and fish confiscated besides.

The effects of the storm above alluded to, were also felt in the Restigouche division and caused a slight decrease in the catch. Salmon began to ascend only on the 14th June, and by the 8th July very few were seen in the stream. During that short space of time, however, the fish were most abundant. The canning establishments received over a thousand daily; but that supply fell to one hundred during the storm, whilst the fish were seen swimming in large shoals in the river. This is a further proof that salmon take to the shore when it meets contrary winds. Net fishing yielded 275 barrels of salmon on the Quebec side of the Restigouche River. Fly fishing was all that could be desired; the largest fish caught weighing 45 lbs. The water in Restigouche River as well as in other streams of this division, kept very low during the summer, which feature, according to the opinion of our most experienced fishermen, is favorable for next year's fishing. They claim that, when water is low during the spawning season, the fish will lay their eggs in the deepest pools, thereby guarding them against the ice when water

Should the water be high at spawning time, salmon near the shores and deposit their ova in two or three feet of water, and when the water falls the eggs will dry and be lost or be carried away by the ice, should freshets happen. This opinion appears to be

very plausible.

The seventeen licenses granted in this division yielded to the Department the pairry

**5 000 I have often recommended a change in the mode of rating license fees, and am happy to seee that there is an intention of carrying out my suggestions. When we consider the heavy outlay incurred by Gov. enment to improve salmon fishing, especially in the counties of Gaspe and Bonaventure, and compare the actual results obtained with the poor fishing of years past; when we calculate the beneficial effects of fish breeding establishments in full operation; I do not believe a single fisherman would find fault with a slight increase on his license fee. Besides the rates now levied in the County of Gaspé, and which are certainly out of all proportion with the yield, there occur two other modes of rating the license fees. first consists in fixing a fee of so much per barrel of salmon caught, say, one dollar. The second would be to offer these stations at public competition. The last system might yield at first a larger revenue, but would be subject to a great many inconveniences, and would result unjustly in several cases, because many would bid higher than the real value of the stations and might be ruined by a succession of bad years. Others, not being well acquainted with salmon fishing, would occupy stations which, in their hands, would become unproductive, and thus ruin the fishery, besides causing considerable damage to the salmon trade. In my opinion, a rate of one dollar per barrel of fish caught appears most equitable to all parties. Should fishing be poor, the fisherman will pay less; should it be successful, he will pay more, and his profits will increase in a direct ratio to the amount of license fee. This is the rate fixed on all stations in Restigouche River, and fishermen who have there cleared \$1,200 do certainly not grumble at paying a license fee of \$65.

The Mission Indians, with whom we always had some trouble for the past four or five years, have at last been brought to reason and common sense. They have occupied and fished the station which the Department so liberally granted them in one of the best spots of Restigouche River, in consideration of their voluntarily abandoning their habits of spearing and poaching. This happy change for the better will allow them to devote more time to the cultivation of their farms, whilst they will directly benefit by the proceeds of their fishery. Formerly, the young men only could procure salmon, and most of the time spoiled it, or exchanged it for rum; whilst the old people and invalids would have no more benefit from these fish than men located hundreds of miles in the interior.

As things are now arranged, the proceeds will be equally divided among all members

of the tribe, according to the number of persons in each family.

In concluding these remarks on the salmon fishery of Gaspe and Bonaventure, I must say that, according to all the reports of our Fishery Overseers and of those who had occasion to visit our rivers during the fall, we have every reason to expect a favourable fishing season for next year. But we must not put too implicit a reliance on this assurance. In spite of the best laws and strictest guardianship, influences, the reason and extent of which we know very little of, may now and then obstruct our endeavours. long, nevertheless, as I occupy the position I now hold, it will be my constant aim to protect as much as I can our rivers, in order that they may regain their former state of prosperity.

Lobster Fishery.

This fishery has only for the past five or six years begun to engage attention, but ud to the present time our people appear to have utterly neglected it, and this source of wealth in our own waters seems to have fallen into the hands of American citizens. am, however, slightly in error in making this wholesale assertion, for an enterprising and energetic Canadian who closely follows the progress of the fishing industry, and to whom we are indebted for a new and improved process by which salmon in a fresh state can be procured at all times of the year and placed in the reach of all, (I allude to Mr. John $5-2\frac{1}{2}$

Holliday, of Quebec,) decided last spring upon taking a share in this new source of industry and competing with American firms by starting two establishments, one at Sandy Beach and the other at Malbaie. Another Canadian, Mr. Angus McKay, also opened an establishment for canning at Capelin River, in Bay des Chaleurs. But the most considerable establishment of this kind is that of Mr. Hogg, of Portland, Me., located at Carleton Bay des Chaleurs, who employed last season 99 men and 37 girls. He procures lobsters from the Bays of Cascapedia and Carleton and on the New Brunswick coast, opposite his establishment. Men are constantly engaged fishing, and the lobsters are brought daily to Mr. Hogg's establishment by a steamer regularly engaged for that purpose. The following is the quantity of lobsters caught by Mr. Hogg's men:—

June	217,502
July	332,327
August	256,616
Sentember	

The returns of the local fishery overseer (Mr. Allard) show that, out of this number of lobsters, only 60,800 pounds were preserved. There must evidently be a mistake somewhere, and I have no hesitation in accounting for it by this overseer's ignorance, as I have been informed that in Carleton only, 216,432 pounds were canned. Mr. McKay also preserved 4,176 pounds, and Mr. Nye, of Port Daniel, 1,300 pounds. From returns given me, I find that Mr. Holliday preserved 22,00 pounds at Malbaie, and 7,000 at Sandy Beach.

Although lobsters are still most abundant in the bays where the fishing is carried on there has been such waste committed in Maria and Carleton during the three first years this fishing was carried on, that a decrease is noticeable in the quantity as well as in the size. The example of the United States, where this fishing is now ruined, ought to have been a lesson to our people, but greediness and want of forethought is so great among them that, had it not been for the well timed regulations of the Department, our lobster fishery would soon have been a thing of the past. In justice to Mr. Hogg, I must say that both he and his men were most attentive in complying with the law and liberating all lobsters found to be under the legal size, or with eggs attached.

From observations which I myself made and caused to be made during the past season, I feel convinced that the existing regulations were most opportune, and that, should it ever become necessary to make a close season for lobsters in order to give them time to breed, in should be during the months of September and October. Mr. McKay, who is an intelligent fisherman, and Mr. Dimock, who has closely followed this fishing during the whole of last season, assure me that soft shelled lobsters are mostly met with in September, and that those caught in August were much harder. This agrees with Mr. Hogg's statements, and in looking over the returns of his catch, it will be seen that the decrease in September is due to the fact that he had to liberate more lobsters during that month than in others, so as to comply with the law. For all practical purposes of due protection to this branch of fishery, I therefore consider that the close season for lobster fishery on the Quebec shore should extend from 15th August to 15th October. By comparing the number of lobsters caught with the quantity canned, it will be noticed how small in size they are, each lobster hardly yielding one pound of flesh, and if a timely restriction is not put on this fishery the size of the species will go on still more decreasing.

In order to save repititions, I shall group under the same heading my remarks on halibut, mackerel and trout fishing, when treating of Labrador Division.

RETURN OF FISHING STATIONS, kinds of Vessels, number of Men, COUNTY

<u></u>																
Name of Place.		Ve	ssels,		Fish Bos			lat ats.	of Fishermen.	Shoremen.	Sa		Cod Seines.			
	No.	Tons.	Value.	No of Sailors.	No.	Value.	No.	Value.	No. of Fis	No. of She	No.	Yards.	Value.	No.	Yards.	Value.
Cape Chatte Ste. Anne des Monts. Ruisseau à Rebours. Rivière Claude Rivière à Pierre Mont Louis Anse Pleureuse. Ruisseau des Olives. Gros Mâle. Manche d'Epée. Madeleine River. Grande Valée Petite Valée. Petite Anse. Grand Cloridorme Point à la Frégate Petite Anse. Grand Cloridorme Point Sêche. Grand Etang Echourie Pointe Jaune. Anse à Valeau. Grande Anse. Petit Cap Little Fox River. Great Fox River. Great Fox River. Anse au Gris Fond à Anse à la Louise. Cape Rosier. Cape Gaspé. Indian Cove. St. George's Cove. Grand Grève. Little Gaspé. Seal Rock Cap Aux Os. Peninsula & Lobste Cove S. W. Bay Barachois Douglastown Seal Cove Anse Friant Chien Blanc Belle Anse. Point Peter Corner of the Beach Cannes de Roches Sandy Beach Pero & Malbaie Bonaventure Island, Petite Rivière.	2	132 2 855 1 30 1 33 1 72 1 11 72 1 6 61 2 25 1 48	3,400 2,000 350 4,400 2,800 2,400 3,60	9 15 15 15 15 15 15 15 15 15 15 15 15 15	40 3 1 24 7 1 1 248	101 215 277 456 111 100 30 2,355 374 41,300 1,300 6,284 5,92 2,738 1,74'	126 6 7 7 1 25 3 3 3 5 5 3 1 1 3 4 4 4 5 5 5 6 6 6 7 7 5 5 6 7 7 5 5 6 7 7 5 6 6 7 7 5 6 6 7 7 5 6 6 7 7 7 5 6 7 7 7 7	250 200 225 51 66 68 88 88 55 56 38 10 44 166 50 38 21 48	106 9078 13 11 11 11 11 11 12 13 14 14 15 15 11	30 6 6 5 5 5 5 6 11 1 1 1 1 1 1 1 1 1 1 1	1 1 2 2 1 1 2 2 2 2 2 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5	260 580 100 144 5 53: 1,236 2,358 848 880 2 256	160 30 30 30 30 40 40 40 12 40 112 40 112 40 112	1	60	::

kinds of Nets used, kinds of Fish and Fish Oils, &c., &c. OF GASPÉ.

NETS AND SEINES.

	Herr Sein	ing i	H	erring N	ets.		acke eine		1	Ascke Nets.		 	Capel Seine	in 8.		Launc Seines			ea.		Brush	Fisherses.
No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Value,
138	3960		500	2,000 240 560 400 2,000 480 80 60 15 2,360 1,000 2,000 400 1,000 2,000 520 420 420 420 420 4360 3,200 4,000 698 548 458 458 458 458 458 458 458 458 45	90 90 90 488 300 400 1200 420 420 420 100 100 110 1,400 1,300 1,400 1,300 1,400 1,200 1,300 1,400 1,500 1,	2	260	85	6 11 5 3 3	80 	400 100 200 122 1700 1200 203 144 522 366 844 525	1 1 1 2 2 2 2 2 2 1 1 1 1	600 600 1300 6000 240 44 1133 1200 500 300 2400 2400 120 2800 90	92 40 40 400 169 75 32 24 236 40 236 152 152 100		600 30	20 25					\$
, , ,		i	58	1,850	828			l:::	1	18 23		5	200	200	٠,			!;;!		, ,	, , ,	• •

RETURN OF FISHING STATIONS, kinds of Vessels, number of Men,

COUNTY

Pabos New Port Cap aux Anses & Cap d'Espoir		v	essels.		Fial Boo			Flat oats.	Fishermen.	Shoremen.	Salmon Nets. Cod Scines.						
	No.	Tons.	Value.	No. of Sailors.	No.	Value.	No.	Value.	No. of Fi	No. of Sh	No.	Yards.	Value.	No.	Yards.	Value.	
New Port Cap aux Anses & Cap		210	7 000		82 59 82 63 27	5,800 4,410	34 28 36	360 430 350 360 220	164 114 164 126 54	$\frac{77}{126}$	6 2	1,140	432 128				
Total	 		36,350	91		77,317		8,344	2,301			23,682	7,150	1	60	24	

kinds of Nets used, kinds of Fish and Fish Oils, &c., &c.—Continued. OF GASPÉ.—Continued.

NETS AND SEINES.

Herr Sein		н	erring N	lets.		Mackerel Seines.			Macke Nets		Capelin Seines.							Sea Vet		Brush	Fisheries.
No.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Value.
	\$	192 115 215	4,610 8,600 5,000	\$ 2,770 1,200 2,560 1 820				 1 9 6	50 96 240	60	10 12	545 470 600	535 455 500			\$			\$		\$
142 5040	2,984	$\frac{62}{2,077}$		26,670	<u> </u>	336	125	121	4,623	1,586	$\frac{6}{123}$			_	1,005	485	 	 		 	<u></u>

RETURN OF FISHING STATIONS, Kinds of Vessels, number of Men,

COUNTY

Name of Station.	Salmon, barrels, (cured).	Salmon, (fresh in ice).	Salmon, (in cans).	Salmon Smoked.	Cod, qu	Fall	Haddock, quintals.	Ling, quintals.	Halibut, barrels.	Herring, barrels.
Cape Chatte Ste. Anne des Monts Ruisseau à Rebours Rivière Claude Rivière Claude Rivière à Pierre Mont Louis Anse Pleureuse Ruisseau des Olives Gros Mâle Manche d'Epée Madeleine River Grande Vallée Petite Vallée Petite Vallée Petite Vallée Petite Vallée Petite Loridorme Petit Cloridorme Petit Cloridorme Pointe Séche Grand Etang Echourie Pointe Jaune Anse à Valeau Grande Anse Petit Tap Little Fox River Great Fox River Great Fox River Great Fox River Little Gaspé Steal Rock Cape Rosier Cape Gaspé Little Gaspé Seal Rock Cap aux Os Peninsula and Lobster Cove South-West Bay do River Barachois Douglastown Seal Cove Anse Briant Chien Blanc Belle Anse Point Peter Corner of the Beach Corners de Roches Sandy Beach Perce and Malbaie Bonaventure Island	9 8 23 8	5,241 4,760 14,325 20,760 10,092 7,079			730 2,965 60 100 150 950 100 50 200 50 240 240 364 310 333 567 661 1,800 210 275 380 2,590 2,400 1,687 440 451 1,016 195 1,440 4,707 746 400 451 1,676 4,736	130 365 30 50 250 50 250 50 100 100 130 78 88 92 148 137 200 91 147 130 155 860 444 502 10 10 10 10 10 10 10 10 10 10 10 10 10			4½ 14 2 4½ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20 64 110 200 15 55 122 10 100 10 8 2 2 75 6 6 111 112 18 199 500 2022 21 32 31 1,210 17 1

kind of Nets used, kinds of Fish énd Fish Oils, &c.—Continued.

OF GASPÉ.

			ls,						()ils.		Fish w	sed as	Mar	ure,
Smoked Herring, boxes. Mackerel, barrels.	Trout, barrels.	Hels, barrels.	Cod Tongues and Sounds, barrels.	No. of Seals.	No. of Seal-skins.	No. of Whales.	No. of Porpoises.	Seal Oil, gallons.	Whale Oil, gallons.	Porpoise Oil.	Cod Oil, gallons.	Herring, barrels.	Capelin, barrels.	Smelt, barrels.	Cod Roes, barrels.
12 2 37 40 45 10 10 18 6 6 3 20 10 10 10 10 10 16 16 6 8 5 7 26 22 20 10 10 10 10 10 10 10 10 10 10 10 10 10	2		2 30 11 17 53 17 2 2 3 3 3 4 3 80			5 12	1		2,240	12	440 1,164 60 150 900 150 900 120 200 14 1,630 190 327 270 300 542 593 1,500 170 275 320 356 455 1,282 3,005 1,493 225 265 200 430 431 1290 104 1,331 220 104 1,290 104 1,290 104 1,290 105 1,290 106 107 107 108 108 108 108 108 108 108 108 108 108	64	100		13

RETURN OF FISHING STATIONS, kinds of Vessels, number of Men, COUNTY

Name of Station.	Salmon, barrels, (cured).	Salmon, (fresh in ice).	Salmon, (in cans).	Salmon, Smoked.	Cod, qu Summer Fishing.	Fall	Haddock, quintals.	Ling, quintals.	Halibut, barrels.	Herring, barrels.
Pabos. New Port. Cap aux Anses and Cap d'Espoir. Anse à Beaufils.	51 73 1 250	119,634			3,595 5,770 3,355 1,620 60,370	1,060 1,100 1,575 600 13,893	10 10 30 146½	163	$ \begin{array}{c} 15 \\ 20 \\ 1 \\ \dots \\ 134\frac{1}{2} \end{array} $	200 225 200 50 6,254

N.B.-Lobsters Preserved

RECAP TU VALUE OF THE DIFFERENT

kind of Nets used, kinds of Fish and Fish Oils, &c.-Continued.

OF GASPÉ.

· ·				Sounds,						0	ils.		Fish us	ed as	Mar	ure.
Smoked Herring, boxes.	Mackerel, barrels.	Trout, barrels.	Eels, Barrels.	Cod Tongues and Sobarrels.	No. of Seals.	No. of Seal-skins.	No. of Whales.	No. of Porpoises.	Seal Oil, gallons.	Whale Oil, gallons.	Porpoise Oil.	Cod Oil, gallons.	Herring, barrels.	Capelia, barrels.	Smelt, barrels.	Cod Roes, barrels.
69	15 10 10 499	13½	1/2	$ \begin{array}{r} 20 \\ 8 \\ 10 \\ 16 \end{array} $ $ 172_{4}^{3}$			22	1		16,300	17	3,000 4,120 4,160 1,330 49,043		1000 1586		138

LATION.

FISHERIES OF GASPÉ DIVISION.

Lobsters (in cans). Fish used as manure Cod Tongues and Sounds. Cod Oil Whale Oil. Porpoise Oil	173 do 49,043 gallons 16,300 do 17 do	\$ cts. 	7,250 487 1,211 24,521 13,040	00 00 50
Total value of the products of the Fig do do do	heries, 1874 1873		466 ,361 412,992	
Increase			53,369	20

RETURN OF FISHING STATIONS, kinds of Vessels, number of Men COUNTY OF

kinds of Nets used, kinds of Fish and Fish Oils, &c., &c.—Continue d. BONAVENTURE.

NETS AND SEINES.

Herring He Seines.	erring Nets.	Mackerel Seines.	Mackerel	Nets.	Cap	elin Seines.	Launce Seines.	Seal Nets.	Brush Fisheries.
No. Yards. Value. No.	Yards.	No. Yards.	No. Yæds.	Value.	No.	Yards.	No. Yards. Value.	No. Yards.	No. Value.
\$ 66 	1,800 8 240 8 2,016 78 4,092 1,58 5,760 1,15 4,141 80 4,400 48	0	39 1,248 1 192 56 1,792 113 3,610	722 672 672 7350	4 26 2 6 2 5 6 2 5 6 2 7 4	160 160 160 160 880 732 80 240 240 216 1,000 900 3,080 2,233	Nets used t	y farmers i	not included.
	31,287 8,04	4	6,87	8 2,57	3 147	6,310 5,10	6	- - -	. 5 30

RETURN OF FISHING STATIONS, kinds of Vessels number of Men, COUNTY OF

Name of Station.	Salmon barrels (cured).	Salmon (fresh in ice) lbs.	Salmon (in cans), lbs.	Salmon smoked).	Cod, quintals.	Cod, quintals.	Haddock, quintals.	Ling, quintals.	Halibut, barrels.	Herring, barrels.
Anse au Gascon Anse à Barbe Port Daniel Chigouac Paspebiac			í		360 140 2,290		10		••••	80 80 370
Nouvelle New Carlisle Grand and Little Bonaventure Capelin, Black Cape and New Richmond		1,320 28,915			180 1,240 3,265	120 1,400 2,525	30		••••	250 900 1,970
Maria Carleton Nonvelle Maguasha Fleurant's Point		1	38,232 15,225 3,000 7,800 28,420 1,221	• • • • • • • • • • • • • • • • • • •	18 35 40	20	80			80 150 140
Englishman's Brook Point Pt à La Garde Battery Point Little Battery Cross Point and Mission Point			700	••••						
Bourdon Point	46		20,000 174,526				94	26		4,320
N.BFly fishing:- River Bonavento do do Little Cas do do Grand do do Matapedie do do Upsalquit da do Restigouc	caped do $\frac{1}{2}$ ch $\frac{1}{2}$ he	Lower Div	vision					4 1 1 1 8	15 S 3 18 44 55 19 40 52	almon . do do do do do do

kinds of Nets used, kinds of Fish and Fish Oils, &c.—Continued. BONAVENTURE.

										(oils.		Fish	used as I	Manu	re.
Smoked Herring, boxes.	Mackerel, barrels.	Trout, barrels.	Eels, barrels.	Cod Tongues and Sounds.	No. of Seals.	No. of Seal-skins.	No. of Whales.	No. of Porpoises.	Seal Oil, gallons.	Whale Oil, gallons.	Porpoise Oil, gallons.	Cod Oil, gallons.	Herring, barrels.	Capelin, barrels.	Smelt, barrels.	Cod Roes, barrels.
	5 15			6	••••	• • • •				••••		800 200 3,080	••••	300 200 189 4,000		
500	13	101		10						••••		90 1,050		2,000 3,500		
500 450 370	27	191	8	16				 ::::				860 45 60 70		45 30 25		

1,820	60	30	8	32					ļ			7,875		10,280		

RECAPITULATION.

VALUE OF THE DIFFERENT FISHERIES OF BONAVENTURE DIVISION.

			3 cts.	\$	ct
Summer Cod fishery	9,053 quintals @		5 00	45,265	
Autumn do			5 00	32,985	
Herring fishery			5 00	21,600	00
do (smoked)	1,820 boxes	• • • • • •		455	00
Mackerel fishery	60 barrels		10 00	600	
Haddock do	94 quintals		5 00	470	
Ling do			5 00	130	
Salmon (pickled)	46 barrels		16 00	736	
do (fresh in ice)	64,878 lbs			3,243	
do (in cans)		• • • • •		43,631	
Trout fishery		• • • • •		240	
Eel do	8 do	• • • • • •		96	
Lobsters (preserved)	225,908 lbs	••••		56,477	
Fish used as manure,				2,570	
Cod Oil		- • • • •		3,957	
Cod tongues and sounds	32 barrels	• • • • •	7 00	224	00
Total value of the products of the	Fisheries, 1874			212,640	90
	lo 1873			87,029	
Increase				125,611	90

LABRADOR DIVISION.

The fishing season of 1874 was disastrous for the north shore fishermen. By com paring the statistics of this division with those of 1873, it will be noticed that cod fisher yielded 92,800 quintals against 39,422 in 1874, and that salmon fishery, which gave the large quantity of 1,214 barrels of fish, without reckoning 279,000 pounds preserved fresh, yielded last season only 899 barrels and 171,777 pounds fresh. The statistics will likewise exhibit a great falling off in the catch of halibut and herring, there being

against 241 in 1873 21 barrels halibut 6,283 barrels herring 8,141

whilst it is worthy of remark that the greatest quantity of the herring above stated was caught by Esquimaux Point fishermen who repaired to Newfoundland.

As I intend devoting a special paragraph to each of the fisheries of this division, I have the honor of referring you to these articles for detailed information on the subject.

This division which, properly speaking, comprises the whole of the north shore extending from Point des Monts to Natashquan and that part of the coast of Labrador from Natashquan to Blanc Sablon,—was discovered and visited by French and Spanish fishermen long before the coasts of Gaspé. It is even stated that there were fishing settlements on that coast as early as the tenth century. I shall not enter here into the history of these beginnings, having already done so in previous reports. It will be sufficient to state that, however great the wealth of these fisheries may have been under the former discoverers, it has in no way decreased up to the present date. For a long period, and even to the last thirty years, the fishing industry of this coast was in the hands of a few privileged individuals or of firms which shared the profits exclusively between themselves. to the detriment of the general public, but since that period, individuals have disappeared, firms have been dissolved, leases have expired, and all fishings, with the exception of the salmon fishery, have been left open to public enterprise and competition. thither by the reputed wealth of these isheries, settlers from the south shore, Magdalen Islands and Newfoundland speedily occupied the north shore. The population of the north coast is composed of people from all parts of the Dominion. The eastern section was the first part settled; and up to forty or fifty years ago Montagnais Indians were its only inhabitants from Mingan to Bersimis. The most flourishing posts are at the present date those of Sheldrake, Magpie, St. John, Natashquan and Kegashca.

The fishing season, taken as a whole, was very poor, and much below that of last In a few localities only, such as Esquimaux Point, Natashquan, Kegashca and Bonne Espérance, did it prove successful. Settlers in other posts had to repair to the most populated centres of Sheldrake, Long Point and St. John to secure food for the winter. On the coast of Labrador properly so called, fishmen have secured amply for their winter supplies, but this is due to the advantage they possess of being enabled to rely on salmon fishing and seal hunting. They are also engaged in cod fishing and enjoy further advantages in trading with our merchants over fishermen who are compelled to submit to the exigencies of the mode of trading carried on by the Jersey firms. This went sf success has discouraged most of the Acadian families which had settled at Seven Islands, and I notice by the local fishery overseer's report that six of them have returned to Magdalen Islands which they should never have abandoned to seek advantages so doubtful compared with those presented by their rich farms and abundant fisheries.

A large immigration from Newfoundland is expected in the spring at Kegashca and Bonne Espérance, where the abundant yield of fisheries and some good land offer great attraction. Several families from Newfoundland have already settled there during the past two years; they are reckoned an enterprising class of fishermen, but I think the cider settlers complain of their arrival. Should any reliance be placed upon the information supplied by the fishery overseers of Pacachoo and Bonne Esperance, most of these new settlers are of quarrelsome dispositions and addicted to stealing, and the want of a good stipendiary magistrate is in consequence much felt there. The large increase in the 35

 $5 - 3\frac{1}{2}$

population of the north coast, especially during the summer season when foreigners repair to its shores for the purpose of fishing or trading, loudly called for the appointment of a local stipendiary magistrate at some convenient place on the coast. The local government, understanding this want, appointed such an officer at Exquimaux Point. But, as civil causes can be pleaded only at Moisie, seventy-five miles distant from Exquimaux Point, settlers located at one flundred or one hundred and fifty miles below the Point cannot derive much advantage from this court of justice. It being also impossible for the magistrate to enforce his judgments, no great reliance can be placed on his services. It will therefore be evident that the end aimed at by the local government in appointing a stipendiary magistrate for this remote part of Canada has not been attained and that, so far, the administration of justice there has been a ridiculous affair, much more likely to disgust than afford a beneficial example to the resident population.

Up to the present time agriculture has been entirely ignored on the north coast, though a large tract of land from Kegashca to Point des Monts might be utilised for growing vegetables, turnips, &c. With the additional help of a little farming, the

inhabitants could always provide against the hardships of a bad season's fishing.

Whilst alluding to the different fishings carried on in this division, I shall have occasion to speak more fully on certain points which I have merely touched upon in this preamble.

Seal Fishing.

The comparative success experienced in this fishery during the season of 1872 had revived the hopes of seal fishermen, but the failure of the past two years has thrown a complete damper on these expectations. During the fall of 1872, 1.609 seals were caught with nets in Pacachoo division, whilst in 1873 only 251 were taken in 13 stations and with 3,417 fathoms of nets. La Tabatière, which formerly used to be a famous station for seal fishing gave only 59 seals last fall against 550 in 1872. In spite of these discouraging results, I am, however, led to believe that the temporary disappearance of seals is more to be attributed to local causes than to a decrease in their numbers caused by the great destruction of them on the ice during the spring hunt. Seals generally ascend the Gulf during the month of November; last year they came in about the 15th of that month, but the ice which usually appears about the middle of January, moved on the 19th of November, and during the whole of that time the bays frequented by seals and where the nets are set, were a compact mass of ice, so much so that seals were compelled to follow the channel to reach their breeding grounds.

Seal Hunting on the Ice.

In spite of the immense destruction made of these animals at the entrance of the Strait of Belleisle, on the coasts of Newfoundland and even Cape Breton, and on those of Greenland, where on account of the ceaseless war waged upon these defenceless animals. merchants begin to apprehend a complete destruction of the species, our people all agree in stating that they still notice no decrease in their numbers. It is true that sedentary seal fishing in the fall has dwindled to almost nothing, but this failure may reasonably be attributed to an increase in the number of population and buildings on the coast, greater noise and bustle and the smoke from buildings, all of which are so many causes tending to frighten away seals from the shore whilst they ascend the Gulf without their species being apparently diminished in number. Fifteen schooners from Esquimaux Point, and six from Natashquan, went out seal hunting last spring. Although the total catch was more than that of the previous year, several schooners made very little, being caught in the ice during the best part of the hunt. The schooners from Esquimaux Point took away 4,976, and those of Natashquan 1,187. It is remarkable that all these seals were of a large size, which may be accounted for from the fact that they were fallen in with at anate period when all the young ones had left the ice fields. Great apprehension is felt in Newtoundland on account of last year's hunt not having been as abundant as in past seasons, and also that in spite of the regulations forbidding the departure of steamers

before the 10th March, young seals were still found on the ice unfit for oil making, and fears are entertained as to the probable results of total extermination, should not timely measures be adopted to stay the destruction. Simple prudence and common sense certainly point to the adoption of some means to prevent a destruction larger than the productive power of the species, but as already stated above, the experience of our fishermen goes to show that the quantity of seals in the Gulf has not diminished, and that an increase was even noticeable this year, but that if the hunt was not more successful it is due to circumstances over which man has no control. In order to fully understand this question and to be enabled to find a remedy for the impending evil, the Government of Newfoundland proposes sending naturalists to Greenland in order to study and observe the conditions of this fishery, so as to be enabled afterwards to devise means for its proper regulation. Taken altogether, our people did pretty well; seal oil sold for fifty cents a gallon, and pelts fetched \$1.25 each. A company formed at Quebec, at the head of which was Dr. Beaubien, of Montmagny, intended fitting a steamer for seal hunting in the Gulf last spring, but their vessel was unfortunately held captive in the ice at Indian Cove, and it was too late when she could be got out. This unfortunate result is doubly to be deplored; first on account of the loss of a good season's fishing, and second because a vessel better suited for such a pursuit will seldom be found. Besides the number of seals killed on the ice and those caught with nets, about 1,050 were killed in different ways on various parts of the coast.

STATEMENT of Sealing Vessels at Esquimaux Point.

Names of Vessels.	Tonnage.	Master.	No of Men	No. of Seals.
D. Cronan Progress Iberville Victoria Amelia Labrador Acona Elizabeth Marguerite Mariner J. C. Miller Wide Awake Lessa Loup Marin Busy. Three Brothers St. Pierre	52 36 46 50 43 29 27 27 21 29 41 42 41	P. Le Marquant N. Boudreau Hip. Boudreau G. Cormier P. Cormier P. Doyle A. Vigneau L. Cormier J. Cormier E. Landry S. Doyle Am. Vigneau P. Vigneau F. Cummings P. Petitpas B. Petitpas H. Boudreau Frs. Bélanger	10 10 10 10 10 8 12 10 10	1,100 700 400 500 416 400 300 300 250 180 230 50 40 30 15

STATEMENT of Sealing Vessels from Natashquan.

Name of Vessels.	Tonnage.	Owners.	No. of Men.	No. of Seals.
Notre Dame de la Garde	19 24 23	T. Vigneau. D. Talbot E. Landry V. Vigneaul. B. Vigneau.	9	160 430 200 212 200

Cod Fishery.

There is very little to say in favor of cod fishery this year on the coast, it being one of the poorest seasons experienced for many years. First of all in certain localities as at Moisie, Sheldrake, Thunder River and St. John River, fish appeared very late and in small numbers, so that the average catch did not average from 20 to 25 quintals. Fishing was better in other localities, such as Natashquan, Kegashca, Mutton Bay, Bonne Esperance and Blane Sablon, each boat giving from 50 to 100 quintals of fish. Taken all together, however, fishing was poor, and out-fitters of Long Point, St. John River and Sheldrake suffered heavy loss in consequence. Bait and cod failed on the western part of this division, but both were abundant on the coast of Labrador, so much so that it is presumed cod had too much to feed upon and that this was the reason why the fish did not bite. One hundred and twenty schooners from the Maritime Provinces, Magdalen Islands and Esquimaux Point were engaged fishing on different parts of the north shore, from Pacachoo to Bonne Esperance; twenty-nine fished at Kegashca with varying success. The above schooners from Magdalen Islands and Esquimaux Point are the same which went seal hunting in the spring. Here follow the names of those which I found at Mutton Bay:—

Name of Vessel,	Tonnage.	Captain.	Port of Registry,	No. cf Men.	No. of Boats.	No. of Nets.	Quintals of Cod Fish.
Esperance Ella Drednaught Labrador Busy Painchaud Cutter Typhoon Phoeli Marie Louise Arouse Gazelle Sion Liva Mowat Royal Albert Swed Flag Jane Stella Hanly Spurt Ellen Jane Laue Ella Bright Sea Serpent Merry Rosanna Wart Jane Lady Franklin	31 15 46 39 46 52 33 21 48 20 34 29 29 248 47 53 21 22 26 41 20 26 41 20 20 21 21 21 21 21 21 21 21 21 21 21 21 21	Saul Boller Anderson P. Daigle B. Petipas Arseneault L. Boudreau P. Boudreau P. Boudreau P. Boudreau P. Boudreau P. Boudreau P. Boudreau P. Boudreau P. Boudreau P. Boudreau P. Brag Payue Gravel Griles Jersey Wickman J. Doyle Bragis G. Boudreau Martin Monnier Lyson Day Woodman Harvey Kipp Clark Nemlar Morris Jeffrey	do do do do Port au Besque Rose Blanche Port au Basque Cheticamp Bonne Bay do do Cape Blanche Cape Breton St. George's Bay R se Blanche La Poële St. George's Bay	11 9 5 10 10 11 83 138 7 6 10 11 6 8 6 7 6 5 7 4 7 7 7 5 5 8	33 23 3 3 2 4 3 2 3 2 2 3 3 3 3 3 3 3 3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	80 200 25 190 80 50 200 130 600 150 140 100 120 80 60 130 80 60 130 80 60 40 40 40 200

Seine Fishing for Cod.

Since seal-hunting and fishing have become such a precarious pursuit, the north shore inhabitants have been compelled to resort to ead fishing for the purpose of securing the necessaries of life during winter. This fishest is pursued here in the same manner as it

is on the south shore, with hook and line; but as it is found that the fish sometimes remains on certain parts of the coast where it can with difficulty be fished for with the hook and line, several fishermen, especially those of Pacachoo and Bonne Esperance. have gone to the expense of procuring cod seines in order to fish in the same manner as is practised on the lower part of Labrador and on the coasts of Newfoundland. All those who have made use of these fishing engines have done well. Several other fishermen evincing a disposition to follow these examples, an alarm was spread among the Jersey firms, which threatened, or seemed to threaten, that this mode of fishing would injure the cod fishery and occasion a decrease of the fish in the waters of the Gulf. They caused a long memorial to be drawn up and forwarded to the Government, requesting the prohibition of seining for cod. This memorial is signed by the agents of all the Jersey firms having establishments on the north coast. It is therein alleged that the use of seines is almost general on the coast, that it is of such a destructive character that all the fish would be destroyed thereby after the season of 1874, and that all the Jersey firms which had been established at so much sacrifice would see their trade utterly ruined. These allegations being altogether erroneous or greatly exaggerated, I venture to state a few facts which will place the matter in its true light, and help to direct the confidence of Jersey firms and that of our own people towards the future prosperity of our cod fisheries. First of all, I am aware of only two seines on the whole extent of the north coast where Jersey firms have cod fishing establishments; one of these belongs to a Jersey firm itself (Messrs. Colas), and the other to Mr. Touzel, both of Sheldrake. These seines are used perhaps once in every two years. In the divisions of Pacachoo and Bonne Esperance, I am aware of ten fishermen who use cod seines. They have had them for the last three or four years, having found it impossible to pursue cod fishing with anything like success without those engines. Within the limits of both these divisions there are no Jersey establishments, the nearest being those of Le Boutillier and De Quetteville, at Blanc Sablon, in the Province of Newfoundland, where seines have been in use for the past twenty years. It is true that cod seining is resorted to on that part of the coast of Canada adjoining Newfoundland by our own fishermen, those of Newfoundland and by some of the representatives of Jersey firms having establishments in Newfoundland: but the facts alleged in the above stated petition in favor of prohibiting the use of these fishing engines are either false or so exaggerated that I am led to believe that the end the petitioners had in view in asking the abolition of this mode of fishing was more for the purpose of stopping at once this system, which might ultimately make our own people more independent of Jersey firms, than with a true interest towards the fisheries. Even supposing that this petition had been prepared without any interested ideas in view, a moment's consideration of this mode of fishing, as it is carried on on the coast of Labrador, will be sufficient to convince Jersey merchants, as well as our own people, that nothing indeed is to be apprehended from the use of cod seines. Used fish approaches the coast when spawning and in search of herring and capelin, which form its food. Its stay there seldom exceeds six, and sometimes three weeks, and it is only when the fish is pursuing capelin that fishermen can catch them with hook and line. After this period the fish returns to deep water where it cannot be followed with barges on account of the currents and want of anchorage grounds. This short period of fishing plainly indicates that some other mode of catching fish must be resorted to on the north coast compared with the south shore, where it can be carried on for six months. When the inhabitants of this remote region could rely upon an abundant harvest of salmon and seal fishing, cod fishing was barely thought of; but now that it is almost the only industry upon which they can depend upon for a living, they must secure some fish at all costs. There is no time to lose, since the stay of the fish on the coast is but a short one. A single day's failure will render more gloomy the failure of the poor fisherman isolated on the barren and rocky coasts of Labrador. Should be miss his chance of securing his catch of fish, towards whom can be turn for assistance? What I say here of our people settled on the coast, applies with equal force to fishermen from the United States and Maritime Provinces who resort there for the purpose of fishing. Most of them are poor people who have to 39

make a short voyage; should they not be provided with means to secure a cargo in short time, they lose their summer and fall into debt for years to come. It will be the case this year for a large number of schooners which repaired on the coast for cod fishing without being supplied with seines. The fish often appears on the coast in great quantities, but this is not always a sufficient guarantee that fishing will always be good. It may also bite well, as has been the case for the past six years, or not at all, as it occurred this year at almost all the fishing posts on the north shore, thus causing a total loss of the season to those who had no other mode of fishing than with hook and line.

On reading the petition, one might be inclined to believe that the use of seines is as general on the coast as that of hooks and lines, but that is not the case. As already stated, there are only two seines on the north shore proper, and ten on the coast of Labrador. This number is, however, increased by seines used by foreigners during the fishing season, but they are used only when cod does not bite well, with the exception of seines owned by Jersey firms who keep men hired for the purpose of seining. After a stay of about two weeks on the coast, the cod generally enters the bays in pursuit of capelin, and it is then that some fishermen try and enclose them in bays. so expensive that they can be used only under particularly favorable circumstances. Water must be calm and not too deep; the bottom must be level; no currents or tide must be felt; and even with all these combined, cod often succeeds in escaping the seine. period during which seines can be used lasts about eight days, and years will often elapse without it being possible to catch any fish with them. The strongest argument brought forward by merchants against the use of seines by others when they have themselves used them for years, is that fish are caught in such quantities and so often lost, that it must inevitably ruin the fishing grounds. This allegation is, not to use a stronger expression, greatly exagerated. The Department will undoubtedly have understood from the tenor of my remarks on the duration of the fishery, the cost of a seine and the difficulties of working it, that when the owner succeeds in enclosing a large quantity of fish, he will use his best endeavour to secure it; and that, should he be so unfortunate as to lose it, the thing must be due to extraordinary circumstances. Such accidents will of course happen when seining is practised in a difficult place, or a storm unexpectedly arises; but they are of rare occurrence and will not happen perhaps once in two or three years. They are reckoned as a great calamity, as in addition to the loss of the fish must be reckoned that of the seine which cannot be replaced during the season. Such accidents and such losses are, however, in my mind, more excusable than the waste of fish which is practised in the large establishments when more fish is brought than can be cured at the time, when the surplus is thrown away into the water before it spoils. This is often seen at the large establishments of Blanc Sablon when fishing is unusually good.

Having thus entered fully into the use of cod seines in the Province of Quebec, there only remains for me to add that experience entirely contradicts the assertion of those merchants who claim that their use must inevitably result in the ruin of our fishing grounds. When the immense reproductive power of cod is taken into consideration along with the large area of feeding grounds our waters afford, it seems as if, with the exception of diseases which would annihilate the species, no human power of destruction can extirpate them; so that it appears more than ridiculous to pretend that a few hauls of the seine at Blanc Sablon and elsewhere will ruin this fishery in the waters of the Gulf. Seines have been in use for over one hundred years in that part of the coast of Labrador belonging to Newfoundland, and fishing is usually good; this year, according to reports it was better than ever. On the coast of Newfoundland belonging to the French, codfish ing is practised with seines, trawls, jiggers, hook and line. Should the fish be susceptible of being destroyed by certain modes of fishing, it would long ago have disappeared from these waters as they are all of them practised since the French have been in possession of these grounds, but it is still an unbeard of thing that a French vessel has not made a good catch. Last season was one of the most suscessful ever heard of. By comparing the codfishing on the coast of Labrador for the past ten years, it will be found that in 1862, the catch amounted to 9.980 quintals; in 1872, to 00,591 quintals, in 1873 to 90,000 quintals, besides an immense quantity caught by schooners from the Maritime Provinces and elsewhere, which shows a steady increase in the yield, in spite of the use of seines at places frequented by the cod when entering the Gulf.

It is true that the same parts of the coast are not visited every year by the same quantity of fish, and it has even been known to disappear entirely from certain localities to return afterwards. Such is the case with a part of the coast of Norway where after having been abundant it failed for a period of thirty years, to return afterwards in greater abundance than ever.

As already stated the appearance of cod on our coasts is regulated by various causes such as the direction of winds, temperature and above all the migration of bait. In 1867 there was no cod on the north shore or on the coast of Labrador owing to the scarcity of bait. During that season a sort of disease prevailed which destroyed bait in such quantities that vessels and steamers would meet with banks of them in a dead state. It was also a season of ruin and distress for the inhabitants, and had it not been for the timely assistance which Government afforded them, several would have died from starvation.

In order to give additional weight to these remarks, I might have supported them with numberless affidavits from persons practically acquainted with the facts, but I deemed it sufficient to send you four with my special report, which you can publish, should you consider it requisite. Jersey merchants in their petition allude to the loss which an injury to the cod fishing grounds would entail upon their trade: but I cannot understand how this could happen since the use of seines cannot ruin fishing grounds, a fact of which they are as well aware as I am. Only one cause could have influence upon the Jersey trade, and it is the following: a succession of good hauls may enable our fishermen to liberate themselves from debt, and this might be the result which your Department should encourage as much as possible, because our fishermen having become independent would trade in the Dominion, exchange their fish and produce for the goods of our own merchants, thereby causing a greater circulation of money to the general benefit of the country, whilst the Jersey trade is practised with foreign countries and leaves behind it but poverty and ruin.

Of course abuses may occur in the use of seines; hook and line fishing may be, to a certain extent, injured thereby; but these abuses can easily be remedied at any time, should it be necessary to do so, by Departmental regulations.

I may have been rather lengthy in my remarks, but my intention was to put the Department on its guard, and to prevent a retrograde movement, as I believe compliance with the request of Jersey firms would be sure to achieve.

Although the cod fishery statistics of the north coast are not complete, owing to its being almost impossible to ascertain the catch by schooners from the Maritime Provinces and the United States, it is beyond doubt that last season's fishing was very poor. The catch in 1873 amounted to 92,800 quintals, but this year to only 42,942.

Fall fishing seemed to improve, but fishermen had left. It is owing to this latter fact and to the high prices obtained that the inhabitants have secured enough to sustain themselves during the winter.

Herring, Halibut and Mackerel Fishery.

Herring appears on the north shore early in the spring, especially at Seven Islands, Natashquan, Kegashea and Bradore; but it is hardly looked after at this season of the year, there being no market for it. I think, however, that it might be sent from Seven Islands to Quebec in a fresh state, packed in snow, as it is done with the same kind of fish caught at Green Island and Rimouski. One of these fishermen tried the venture last spring, and his barge's load gave him a clear profit of sixty dollars, which was very fair taking into consideration the fact that from the beginning of April to the end of May fishermen from Seven Islands have nothing at all to do. Herring leaves the shores during the summer season to re-appear in the month of August in greater abundance at some spots than at others.

It first appears on the western part of the coast, then, about August or September on the coast of Labrador; it is at that time larger and fatter, and is known under the name of Labrador herring. This is always pickled and barrelled. Large quantities were caught at Natashquan and Kegashca, but owing to a scarcity of barrels and salt, and to an absence of foreign schooners, the quantity secured was smaller than usual, although schooners from the locality were enabled to send cargoes to the local markets. In the divisions of Pacachoo and Bonne Esperance, herring entirely failed, so much so that twenty schooners from Esquimaux Point were compelled to repair to Portachoix, on the coast of Newfoundland, where, owing to the courtesy of the French officer charged with the protection of the fisheries there, they were enabled in a very short time to secure full cargoes. This last voyage of Esquimaux Point fishermen, happily, closed a successful season. Herring fetched a high price, and seal hunting as well as cod fishing was sufficiently remunerative. These people are the most fortunate on the coast.

Mackerel fishing entirely failed on this coast, only four barrels being caught. United Stated schooners also failed in finding any. It was the same thing in Bay des Chaleurs and Gaspe; but fishermen there do not follow mackerel fishing very actively. It would hardly pay them, this fish commanding a very low price in our markets. Besides, the sudden and numerous migrations of mackerel would make fishing for them very uncertain at stated places of the coast. It is generally caught when fishing bait for

codfish.

very likely detained there.

Although an inferior one, the yield of this fishery in the Gaspe and Bonaventure divisions yielded 1,322 barrels against 670 in 1873. No more than thirty schooners were noticed in the Bay this summer, and they remained there for only two or three days. The reason of this is attributable to the fact that mackerel being abundant on the coasts of the United States as well as on those of the Maritime Provinces, these schooners were

Halibut, as well as mackerel is not, for the above stated reasons, fished for by our people; but as they frequent the same grounds as cod, a few are caught when fishing for the latter fish. About 156 barrels were caught this year against 95 in 1873. The high prices which this fish commands in the United States markets is the reason which induces these fine American vessels to visit the parts of the coast most frequented by halibut. It is taken in a fresh state to Boston markets and other sea ports of the States. The whole of the north coast, from Godbout to Cape Whittle, is frequented by halibut; the most favored localities are, however, Trinity Bay, the Jambons, Point St. Charles, Perroquet Islets and Natashquan. It is stated that American schooners did not succeed as well as usual this year, although they tried new places, and the result showed that halibut was found everywhere around the islands on the north shore. Two of these schooners entered Esquimaux Point one morning and, to the astonishment of all present, caught in one day, at a distance of about 25 to 30 yards from shore, 15,000 pounds of halibut, worth twenty cents a pound in the Boston markets. About ten schooners took cargoes of halibut on the coast.

Salmon and Trout I ishery.

Salmon fishing on the north shore was not so abundant as in 1873. A great numbe of nets was destroyed by storms or ice. In Pacachoo and Bonne Esperance divisions the ice remained in the bays and coves until the month of July, so that fishing for salmon was next to an impossibility. The only places where it could be carried on was in the estuaries of rivers. The catch of Natashquan, Nabissippi, Mingan and St. John Rivers, was about equal to that of last year. During the short space of thirteen or fourteen days 26 barrels of salmon were pickled at Natashquan, besides 14,000 pounds canned. No less than 1,184 fish were caught in a single day. St. John River yielded 85 barrels, or 8 barrels less than last year. Moisie yielded 544 barrels, a slight falling off from the previous season. This result is due to the spring floods and frosts which prevented the setting of nets as early as usual, when salmen were seen already ascending to their spawning bods above Moisie. At Sto. Marguerite and Trinity Bay fishing was about one-

half below that of last year, most of the nets having been carried away and lost. All the fish caught from St. John River to Trinity Bay was purchased by Mr. Holliday's agents in a fresh state. Part of it was canned and the rest shipped to Quebec, where, after being subject to a process of freezing for which Mr. Holliday holds a patent, it is sent to the various Canadian and American markets according to demand. Had it not been for the impediments mentioned above, there was every reason to anticipate a most successful season's fishing from the fact that the spawning beds had been crowded with spawning fish in the previous year. Should our fishermen, however, be enabled to secure nets, I have no doubt that next season's fishing will be a good one, as the breeding grounds are still better frequented than the year before.

The score of salmon angling is not so large as in 1873. This is, however, due to the fact that some of our best rivers, such as Natashquan, St. John's, etc., were not fished. The fearful accident which occurred at Natashquan in 1872, has, I am afraid, deterred anglers from visiting that stream. Mr. Dennistown, who went up that stream last summer, caught 28 fish in one day, and 15 in the St. John. Romaine River yielded 170 fish to Sir Geo. Gore caught 140 salmon at Mingan, and the sportsmen who visited Moisie secured no less than 6,080 lbs. of fish. The large streams of the Labrador coast such as Ste. Augustine and St. Paul, are far from having secured improvements similar to those in the rivers of the north shore. These splendid streams which formerly yielded from five to six hundred barrels of salmon, have now dwindled down to twenty. I am, however, under the impression that, with efficient fishery guardians and constant supervision, it might be possible to prevent the havor and destruction committed by Indians when going up these rivers inland, for the purpose of reaching their hunting grounds. St. Paul River is just as good as Natashquan, if not better, and St. Augustine superior to the St. John River. According to the reports of those who visited them, the spawning beds of these streams are numerous and of the most favorable nature.

Only 138 barrels of salmon were caught in Bonne Esperance Division by 17 stations, and 200 barrels in Pacachoo Division; that is to say 142 barrels less than in 1873. The first of these divisions yields \$50 to the Department, on account of salmon fishery licenses and the second from \$80 to \$90. The fishery laws were generally well observed, with the exception, however, of the Watsheeshoo Division. For several years past, the settlers at Esquimaux Point appear to have made up their minds to peach the streams in that neighborhood, and in spite of the most constant and active guardianship, violations are now and then brought to light. Owing to its peculiar position, this part of the coast is extremely difficult to guard, and it is looked at as a favorite resort for poachers. During the summer season, thanks to the activity displayed by overseers McGee and Gendreau, several Indians were convicted of having (at the instigation of one Blais from Esquimaux Point) caught three barrels of salmon with nets at a distance of twelve miles from the mouth of the river. Blais, who had bought the fish, as well as the Indians were, after a regular trial, found guilty and condemned to a severe penalty, which will most likely deter others from pursuing a similar course. At St. John River I fined two parties, one for having salmon in his nets on a Sunday, and the other for having seined and kept young salmon. At Natashquan another party was sued for violating the Sunday clause but his nets were restored on his proving he had done all he could to comply with the law in this respect. Trout fishing on the north shore as well as on the south coast is not carried on for the purposes of trade. What is caught there is used for home consumption. I regret to state that owing to a regrettable misanprehension, Mingan River was fished in such an irrational manner by one Sir Geo. Gore, that it is to be apprehended years may occur before it can be restored to its former abundance. It is calculated that this gentleman caught forty barrels of trout during the space of two months. Not satisfied with this extravagant and inexcusable mode of fishing, he would undoubtedly have completed the ruin of this river, had we not been there on the 2nd October to stop him. This extraordinary behaviour on the part of a man of the standing of Sir Geo. Gore, is the more to be regretted since the trout caught was used solely to feed a numerous stock of dogs, for which he seemed to have greater regard than for the inhabitants of the coast

who were last year in great danger of starving, or for the poor Montagnais Indians, who were dying from fever and hunger, and whom he threatened to shoot should they go near his tents or attempt to catch a single trout in the river. Such egotism and odious conduct could not be too strongly blamed, the more so when it is compared with the spirit of liberality which prevails among the fraternity of sportsmen in general, and I hope the Department will take the matter into consideration by placing this fine stream in more worthy hands. The statistics show that 79 barrels of trout were caught on the north shore.

The salmon fishery of this division yielded 1,214 barrels in 1873, besides 379,016 pounds preserved, whilst in 1874 there were 899 barrels, and 171,777 pounds preserved.

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RETURN OF FISHING STATIONS, kinds of Vessels, number of Men LABRADOR

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54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70	St. Augustine Bay. St. Augustine River. Karcivi Fraser's Rapid. Pocachoo Big Rigolet Little Rigolet. Pointe Rouge. Kikapoe Island. Kikapoe River Salt Lake, Tabatière Spar Point. BaieRouge, Tabatière Meccatina Island. Big Meccatina. Bay des Moutons Meccatina Kiver. Whale's Head, Meccatina					6 2 1 2 1 1	40 80 40 20	1211111121212111	\$ 10 20 10 10 10 10 10 10 10 10 10 10 10 10 10	1 11 11 4 1 6 3 2 1	2	1 3 2 1 2 2 1 1 1 2 1 4 4 4 20	200 165 60 120 150 60 65 70 50 80 120 70 120 90	100 120 50 70 110 50 50 50 70 50 70 50 25			
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90 91 92 93 94 95	Burnt Island Ronne Espérance Pigou Island St. Paul's River Stick Point Salmon Bay Little Fisheries	 2	20	2,600		1	80 750 150 20 150 1390 20	2 11 3 2 2 8 1	40 275 30 20 30 150 10	4 21 6 4 6 38 2	2 11 4 2 2 24	1 2 10 4 2 2	200 100 200 400 400 200 200	50 50 50 100 100 50 50	2 1 4	200	600 300 1300
97 98 99 100 101 102	Five Leagues Middle Bay Belles Amours. Bras d'Or Anse des Dunes. Long Point.					2 1 2 3 2 5	20 50 60 50	1 1 3 1 4	20 30 30	$\frac{2}{2}$	$\begin{array}{c c} \cdot \cdot \cdot 2 \\ 6 \\ 4 \end{array}$	1 1	100	50 25 25 25	i 1	200	
	Total	43	1348	37,810	148	563	24987 	473	5,242			218	26926	12740	21	3280	3512

kinds of Nets used, kinds of Fish, and Fish Oils, &c., &c. DIVISION.

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RETURN OF FISHING STATIONS, kinds of Vessels, number of Men

LABRADOR

No.	NAME OF STATION.	Salmon, barrels, (cured).	Salmon, (fresh in ice), lbs.	Salmon, (in cans) lbs.	Salmon (smoked), boxes.	Sunmer Fishing.	Fall Fishing.	Haddock, quintals.	Ling, quintals.	Halibut, barrels.	Herring, barrels.
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 33 34 35 36 36 36 37 38 38 39 40 40 40 40 40 40 40 40 40 40 40 40 40	Godbout Pointe des Monts Trinity Bay Islets à Caribou Pointe aux Anglais Rivière Pentecôte. Misty River. Petit Mai Caille Rouge Rivière Ste. Marguerite. Sept Iles Jambons. Moisie River Pigou Rivière au Bouleau Shallop River. Gibraltar Cove. Sheldrake. Thunder River. Ridge Point Rambler's Cove Esquimaux Point Long Point. St. John's River Nabissippi. Agwanus Natashquan Kégashka Mistassini Point Pointe à la Croix Musquaro Washeccoutai La Romaine Little Watsheeshoo Piashter Bay Corneille Betchowan Aleepetal Bay Chicatica Island Mustingue Island Canso Harbour Anse du Portage Pointe Aland River Island Dog Island River Island River Island River Island Lac Salé St. Augustine Bay	22 22 18 3 1 3 3 15 13 3 12 91 2 2	160200	55876 50000		7 2 1826 7 455 1400 2728 5055 2180 1916 175 765 150 560 20 60 60	1280 360 65 250 106 786 574 196 1078 1260			4	2 33 8 8 2 4 7 11 78 7 5710
49 50 51 5 2	St. Augustine River. Nabisipi. Fraser's Rapid. Pocachoo Big Rigolet. Little Rigolet.	8 5 1 3 1	50		••••	80					

kinds of Nets used, kinds of Fish and Fish Oils, &c., &c.—Continued.

DIVISION.

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Smoked Herring, boxes.	Mackerel, barrels.	Trout, barrels.	Sardines, barrels.	Eels, barrels.	Cod Tongues and So barrels.	No. of Seals.	No. of Seal skins.	No. of Whales.	No. of Porpoises.	Seal oil, gallons.	Whale oil, gallons.	Porpoise oil, gallons.	Cod oil, gallons.	Herring, barrels.	Capelin, barrels.	Smelt, barrels.	Cod roes, barrels.
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RETURN OF FISHING STATIONS, kinds of Vessels, number of Men LABRADOR

No.	Name of Station.	Salmon, barrels, (cured).	Salmon, (fresh in ice), lbs.	Salmon, (in cans), Ibs.	Salmon, (smoked), boxes.	Cod, quintals.	Fishing.	Haddock, quintals.	Ling, quintals.	Halibut, barrels.	Herring, barrels.
55 56 57 58	Pointe Rouge. Kikapoe Island Kikapoe River Fonderie Fecteau Salt Lake, Tabatiere Spar Point. Bay Rouge Tabatière Meccatina Island Big Meccatina. Bay des Moutons. Meccatina River Whale's Head, Meccatina. Little Meccatina Gull Island. Rigolet au Chat. Long Island et Ile du Nord Harrington Harbor Matagamion Pointe du Mourier Cape Whittle. Coacoachoo Mouton Bay Nabitipi River Bull Cove. Bay of Rocks. Lydia's Cove. Péche à Lizotte Dog Island St. Paul's River. Stick Point Salmon Bay Little Fishery Five Leagues. Middle Bay. Belles Amours Bras d'Or. Anse des Dunes. Long Point	23 32 44 33 11 88 26 11 11 11 11 12 12 23 33 10 10 10 10 10 20 10 10 10 10 10 10 10 10 10 10 10 10 10				12 2000 500 506 566 1100 85 647 1800 1766 544 4449 449 1060 100 150 150 150 150 150 150 15					
,	Total	899	160250	105876		32,828	6,594			21	6,283

N.B. The number of Salmon caught by

kinds of Nets used, kinds of Fish and Fish Oils, &c., &c.—Continued. DIVISION.—Continued.

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z.						nds						Oı	LB.		Fish t	JSED A	з Ма	NURE.
Smoked Herring boxes.	Mackerel, barrels.	Trout, barrels.	Sardines, barrels.	Eels, barrels.	Tunney, barrels.	Cod Tongues and Sounds barrels.	No. of Seals.	No. of Seal Skina.	No. of Whales.	No. of Porpoises.	Seal Oil gallons.	Whale Oil gallons.	Porpoises Oil gallons.	Cod Oil gallons.	Herring barrels.	Capelin barrels.	Cod Roes barrels.	Smelt barrels.
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fly fishing in this Division was 744.

RECAPITULATION.

VALUE OF THE DIFFERENT FISHERIES OF THE LABRADOR DIVISION.

	1	\$ cts.	S cts
Summer Cod Fishery	32.828 quintals.	, at 5 00	164,140 00
	6,594 do	5 00	32,970 00
**	6,283 barrels	5 00	31,415 00
	9 do	10 00	. #90 00
T 111	21 do	6 00	126 00
Salmon (pickled)		16 00	14,384 00
do (fresh in ice)		0 05	8,585 85
do (in cans)	105.876 do	0 25	2 6, 4 69 00
Trout Fishery	79 barrels	8 00	632 00
Seals		6 00	47,472 00
Cod Oil			15,556 00
Seal do	31,821 do	0 50	15,910 50
Total value of the pro	ducts of the Fisheries, 1874		357,750 3
	do do 1873		518,140 00
Decrease			160,389 6

ANTICOSTI DIVISION.

The Island of Anticosti Company.

In spite of the reproaches to which this Company might be liable for having failed in its promises to settlers induced thereby to leave their country and settle on this heretofore dreaded shore; in spite of the privations and hardships to which bad management exposd them during the dreary winter of 1873, I am not prepared to throw indiscriminate blame upon the company in conformity with the precept: "De mortuse nihil niei bonum," the more so since their efforts, however badly directed, cannot fail to have some influence on the future colonization of the Island. Even at the present moment, although the Company's enterprise did not yield definite success, the public has nevertheless reaped some benefit in the undertaking from the fact that some advantageous posts formerly not inhabited, such as Belle Bay, Salt Lake, Strawberry Cove, are now occupied by settlers, whilst a large increase has occurred in the population of South West Point, Gamache and English Bays. It has been proved that grain crops and vegetables come to maturity on the Island, one half of which at least is fit for cultivation, but the wealth of the fisheries surrounding these coasts is so great that I am afraid it will be some time before the settler will settle himself thoroughly down to the cultivation of land, so easy is it for him to reap the rich harvest of the sea, which lies right at his door. This, however, will come in due course of time, and it will be only when cultivation and fishing are carried on simultaneously that the island will be materially benefitted by the introduction of all the improvements which follow progressive action, such as telegraphic lines, colonization roads, railways, etc. This is probably the period the company had in view when issuing its prospectus; unfortunately a mistake was made in putting such a period too forward. The winter of 1873 was a hard one for the new settlers on the Island, accompanied as it was by isolation, hardship and hunger, three faithful companions. Had it not been for the provision depôts located by the Government at several points on the Island for the relief of wrecked seamen, several families would have died for actual want of food. failure of cod fishing last summer, added to the poor success of a previous year, led to the apprehension of a renewal of previous sufferings; the Government therefore determined upon sending an officer of your Department with provisions to enable these poor people to face the dread of a coming winter with some assurance that they would not die of starvation. Fortunately, circumstances were not so bad as reported; it is true that the fishing was not very successful, but this gave settlers more time to cultivate vegetables, and the crops were so plentiful that, after giving them a small supply of provisions, the agent left with the assurance they were amply provided for the coming winter. These poor settlers were discouraged by the first winter's sufferings, and the deceptions experienced at the hands of the company had deprived them of all their confidence in it; but the wealth of the waters, together with the fertility of the soil and more experience, revived their courage and hopes, so that last fall they saw their way to establishing prosperous settlements.

Should it be true that the Anticosti Company is to break up and abandon its plan of settlement, the settlers will have to rely upon their labor for the necessaries of life. I believe, however, this will prove a happy change for them, as traders from Quebec and elsewhere who visit the posts of this Island will buy all their fish, and supply them with goods and provisions at as cheap rates as on the north shore. The cash system will always prove a stimulant to labor and a guarantee against poverty, which becomes unavoidable when fishermen have once been caught in the meshes of the credit system. Several of the old and new settlers are not very strongly imbued with notions of honesty, consequently several of them, especially the old settlers, took advantage of this state of things to ask for supplies at the hands of the several guardians of the provision depôts, even threatening to break open the stores should their requests not be complied with. I have no doubt many families were last winter reduced to extremity by the sad circumstances on the Island, but, on the other hand, I feel also certain that several heads of families took advantage of these circumstances to obtain supplies and remain idle at their

This is apparent by the investigations held last spring. No proceedings were instituted against these parties, for the simple reason that the guardians, led in error by false representations, had voluntarily delivered supplies; but it is evident that if those who forced open the depôt in 1872 had been prosecuted and punished, the tendency to renew similar depredations would not have been witnessed last winter. Their impunity acted as an inducement. I have every reason to believe that these facts will not be renewed during the winter of 1875; the people are duly notified that no leniency will be shown towards any one trying to procure supplies by such acts.

The Harbors of Anticosti.

I visited the Island of Anticosti four times this summer, and paid particular atten tion to Gamache and English Bays, which, for safety, are inferior to no harbor of the south shore except Gaspé Basin. Vessels of 14 and 15 feet may anchor here in safety during gales and storms. Besides fishermen residing at the several settlements of the north and south coasts of the Island, a great many others come every summer from Gaspé, Douglastown, Shippegan, Esquimaux Point, and even from the United States, to fish around the Island.

Cod and herring fishermen resort principally to English Bay, South West Point, Belle and Capelin Bays, whilst South East Point and Cape Observation are visited by those who fish for halibut.

Cod Fishery.

Codfish was scarce on the coasts of Anticosti Island as well as in other parts of the Gulf last season. It struck early last spring, and was abundant for a couple of weeks, but suddenly disappeared at the beginning of July, not to return again before the fall at a few stations only on the north of the Island namely, at Cape Observation, Belle Bay and Salmon River. It is owing to this fact that the agent of this Department found people of these stations quite satisfied with their prospects.

The returns of the catch of codfish show only 5,158 quintals, against 11,082 for 1873. Twenty-two schooners fished around the Island, whilst this year there were only 12 so engaged, and these took only half cargoes.

Another cause in the above-mentioned discrepancy is the fact that the returns furnished by the local guardians embrace only the period to 25th September, and that the best fishing took place after that date.

The poorest stations were South West Point, English Bay and Strawberry Cove, five

miles from West Point.

The five Acadian families settled at the last mentioned post were last fall in extremely poor conditions.

Complaints having been lodged by fishermen of English Bay against crews of Esquimaux Point schooners for throwing offals of fish into the Bay, thereby hindering fishermen of the locality from catching any fish in these polluted waters, I was compelled to impose a small fine upon the masters of these schooners, in order to prevent a recurrence of these injurious practices.

Herring, Mackerel and Halibut Fishery.

Although not equally good around the whole of the Island, herring fishing was abundant at South West Point and compensated the failure of cod fishery. The returns for 1874 give a catch of 1512 barrels agoinst 1694 in 1873, but this figure would be higher were the returns of the northern part of the Island more complete.

Halibut fishing is not carried on to any extent; what is caught is taken when fishing

for cod. The catch of this season is reported at 161 barrels against 122 for 1873.

No mackerel appears to have been caught.

Salmon Fishery.

With one more station than last year, the catch of salmon doubled that of last year, being 119 against 54 barrels in 1873.

The south east winds which prevailed during part of the season must have been very unfavorable to that fishery; the last stations being those lying on the north of the Island which are most sheltered from these winds. It is to be apprehended however that this fishery will not be as successful in a couple of years, the heavy rains of last winter having caused great damages to the rivers by freshets which carried away the ice on several occasions. This will undoubtedly have an injurious effect on the breeding grounds, as salmon were found on the ice so washed away towards the sea by currents.

Seal Fishery.

Seal fishermen killed 171 seals yielding 359 gallons of oil, against 192 in 1873.

About 30 bears were also killed around the Island, many of which were of an extraordinary large size.

The guardiaus, H. Deschene and Louis Tetu, whom I employed to protect the fisheries of the Island by direction of the Department preformed their duties in a satisfactory manner. It may not be out of place to remark here that the duties of fishery guardians on this Island are very arduous and dangerous and I do not consider the sum of \$40 per annum to each of these guardians, as an adequate salary, I would therefore recommend that a few dollars more be in future added to their pay in order to compensate them for their work and loss of time.

RETURN OF FISHING STATIONS, kinds of Vessels, number of Men,
ISLAND OF

No.	NAME OF PLACE.		Ve	esels.			ning		at ats.	Fishermen.	Shoremen.	Sal	mon N	lets.	s	Coolein	
		No.	Tons.	Value.	No. of Sailors.	No.	Value.	No.	Value.	No. of F	No. of S	No.	Yards.	Value.	No.	Yards.	Value.
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	Cape Observation		• • • •			b	210	3	36	6						• • •	••••
$\hat{5}$	Oro Point Potatoes River	f			•	2	80	2	24	4	2						
6	Caplin Bay					5	200	2									· · · ·
7	McDonald's Cove					13			140					• • • • •	• •	!	• • • •
8 9	S.W.Point & Jupiter East Bay & Betcie		25		3	16	668	21	160	34	7		• • • • • •	•• ••	••;	٠,	• • • •
•	River	.	i 			6	380	9	74	8	7	2	32	8	ı		
10	Lac Salé																
11	Little Lac Salé																
12 13	Shallop Creek	ا نز		0.050		••••	0710		200				i				• • • •
14	English Bay Indian Cove	9	441	8,350	26	62	2/12	60	628	TOP	91			• • • • • •		• • •	• • • •
15	English Harbor	• • • 		•••••	•••	••••	•••	• • • •	••••	• • • • •							• · · ·
16	West Point	l:.:						•••									
17	Strawberry Cove					2	36	7									
18	Fox Bay	!					1,110	22	180				59	16			
19	Mozerold River					7		6	70	6						•••	• • • •
	Cow Point	• • • •	• • • •	• • • • •	••••	$\frac{2}{2}$	80 80		20 20	4	2				$ \cdot\cdot $	• • •	••••
$\frac{21}{22}$	Shallop Creek					2	- 00	1			. Z	2	60	16		• • •	• • • •
	Belle River							i					60			• • •	••••
24	Dauphinais River	ļ				1	45			ĩ		2					
	Total,	10	466	8,750	29	152	6,495	153	1,533	273	125	15	386	95	1	60	24

kinds of Nets used, kinds of Fish, and Fish Oils, &c., &c.

ANTICOSTI.

NETS AND SEINES.

	lerrri leine		Her	ring N	Te t s.		acke eine		N	Iacker Nets		S	apeli	n i,		auno Seine		s	sal No	te.	F	ush ish- ies.
No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Value.
	• • • • • • • • • • • • • • • • • • • •	*	7 6 5 10 22 35	164 228 520	85					418	••••			••				١			45	96
	••••			2 52	••••			••	1	••••			••••]:::]::::	• • • •		.		16		23
•••	••••		682	184	72				:	••••	• • • •	 	506	148				· · · · · · · · · · · · · · · · · · ·	40	8	108	
••	••••	••••	13 4 4	130	75 20 20					••••							••••					
:-			852	7,548	1,893	İ			13	484	260	11	506	148				-	160	24	194	245

RETURN OF FISHING STATIONS, kinds of Vessels, number of Men, ISLAND OF

No.	Name of Station.	Salmon, barrels, (cured).	Salmon, (fresh in ice), lbs.	Salmon, (in cans), lbs.	Salmon, (smoked), boxes.	Cod, quintals.	Cod, quintals.	Haddock, quintals.	Ling, quintals.	Halibut, barrels.	Herring, barrels.
2 3 4 5	Salmon River Morattion Cape Observation Oro Point Potatoes River. Caplin Bay McDonald's Cove. S. W. Point & Jupiter East Bay & Betcie River. Lac Salé Little Lac Salé Shallop Creek Hnglish Bay Indian Cove English Harbor West Point Strawberry Cove Fox Bay Mozerold River. Cow Point Salt Lake Shallop Creek Belle River. Dauphinais River.	17 4				265 100 230 812 550 127 1,617 1,617 380 90 119				8 115½ 24½	20 25 229 487 56 400 2154 1104 98 20 4
	Total	118				4,946	212			156	1,507

kinds of Nets used, kinds of Fish and Fish Oils, &c., &c.—Continued. ANTICOSTI.—Continued.

1						ıds,						On	LS.		Fish 0:	SED AS	Man	URE.
Smoked Herring, boxes.	Mackerel, barrels.	Trout, barrels.	Sardines, barrels.	Eels, barrels.	Tunny, barrels.	Cod Tongues and Sounds, barrels.	No. of Seals.	No. of Seal skins.	No. of Whales.	No. of Porpoises,	Seal Oil, gallons.	Whale Oil, gallons.	Porpoise Oil, gallons.	Cod Oil, gallons.	Herring, barrels.	Capelin, barrels.	Smelt, barrels.	Cod Roes, barrels.
							55.				186							
• • • • •				••••	· • •				• • • •					96				••••
••••	• • • • •	•••	• • • •		• • • •	,	•••••	•••••	••••			[]	• • • •	20	[••••	• • • •	
	• • • • •				••••								• • • • •	80				
														408				
		10				[<u>]</u>	3	3			2			283		• • • • • •		
••••		1	• •		¦••••		. 90	90	1	'	135	320		68	i · · · · · · ·		• • • •	• • • •
••••	• • • • •	•	• • • • •	••••					• • • •				• • • •	1			• • • •	• • • •
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						4	10	10			17			886	1	6		
			· · · ·				. 											
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••••	• • • • •					1	14	14			19			84		•••		1
****	• • • • •			I	1				i					184	1			
		l	l			ļ			 	ļ	i	1	i	145	1			
		ļ									· · · · ·	ļ		30				
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••••	• • • •	• • • •	• • • •		} • • • •			1	· · · ·	1			· · · ·				1	
••••	• • • •				١	J			J · · · ·			1			i			
••••											1	i						<u> </u>
		11	l	l		4	172	172	1		359	320	١	2,284	1	6	\ [\]	
			1	1	<u> </u>		l	l		1	1	1		[i	i	ļ	l

RECAPITULATION.

VALUE OF THE DIFFERENT FISHERIES OF THE ISLAND OF ANTICOSTI.

•			\$ cts.	\$ (cts
Summer Cod fishery	4.94	6 Qntls 6		24.730	
Autumn do do			5.00	1,060	
Herring do			5.00	7,535	00
Halibut do			6.00	936	00
Salmon (pickled) do	11.	3 do	15.00	1,888	00
Trout do	1	L do	8.00	. 88	00
Seals do	17		6.00	1,032	00
Cod Tongues & Sounds		Brls	7.00	28	00
Cod Oil	2,28	Galls.	0.50	1,142	00
Seal do				179	50
Whale Oil	32) do	0.80	256	00
Total value of the pr	oducts of Fisher	ies, 1874	4	\$38,874	50
do	фo		3	53,870	
Decrease.		• • • • • • •		14,995	50

MAGDALEN ISLANDS.

Seal Hunting.

The first industry which induces the people of Magdalen Islands to go out in the spring is seal hunting on the ice of the Gulf. Two schooners from Amherst and eleven from Alright Islands, each carrying a crew of nine men were so engaged during last spring. and after a trip of fifteen days came back with a good load of large seals, excepting one which was crushed among the ice and wrecked. These seals were worth from \$4 to \$6 a piece. Sometimes in the spring the people of the Island will kill hundreds and thousands of seals on the ice driven towards coasts by winds, but for three years past the yield has been small and this year not a seal was visible on the ice around the Islands. Last year several enterprising fishermen began, as had been previously done on the Labrador coasts, to set sedentary nets at several points in Pleasant Bay, where the seals used to resort in great numbers when pursuing herrings for food. This industry is progressing, as 711 seals were caught in this manner against 221 last year. Another mode of catching seals was tried last spring. It consists in using hook and line as in cod and halibut fishing. Twenty were caught in this manner. The greatest drawback, however, to this mode of fishing consists in the facility with which seals will smash the ordinary lines and free themselves and it is contemplated using next season lines partly made of wire. This will most likely succeed, seals taking a bait just as well as cod and halibut.

With the exception of the schooner *Delaney*, which was carried as far as the strait of Belleisle by ice with only two hundreds seals on board, all the other vessels took their cargoes in the space of fifteen days between Matane and St. Paul Islands. The *Jane Emily*, Capt. Turbide was crushed by the ice. She had only forty seals on board when wrecked. Fishermen from the Islands report having seen immense herds of seals in this part of the Gulf last spring. They say they would have had far greater success, had it not been for the steamers from Newfoundland. Several of these steamers are provided with as many as 32 boats and their crews number as high as 300 men. They can enter the ice easier than schooners and when there, the crews make so much noise while landing on the banks that seals have time to plunge into the sea before our hunters can approach them. The crew of a sealing schooner is generally composed of nine men, cook included. The yield of the voyage is divided into shares, each man getting one share with the exception of the cook, who is paid regular wages for the trip. The skipper has one share and a half, clear of all expenses.

Although the number of seals killed this year is not so large as that of 1873, the yield of oil has been greater, the seals being of a larger size. Last year 6,850 seals were killed yielding 19,685 gallons of oil whilst this year the number of seals killed was only 4,280 but the yield of oil reached 21,915 gallons.

RETURN OF FISHING STATIONS, kinds of Vessels, number of Men,
MAGDALEN

No.	NAME OF PLACE.	Vessels.			Fishing Boats.			lat ats.	shermen.	Shoremen.	Sal	lmon I	Nets,		Coc Sein	l es.	
		No.	Tons.	Value.	No. of Sailors.	No.	Value.	No.	Value.	No. of Fishermen.	No. of She	No.	Yards.	Value.	No.	Yards.	Value.
	Amherst Island.	!		8			\$		\$					8)]	`	
2	Pleasant Bay Amherst Harbor Basin Mill Cove Cabin Cove West Cape	6 		• • • • •		46 19 5 31 7	1380 570 150 930 210	41 4 2 4 2	246 24 12 24 24 12	114 45 12 68 15	64 20 10 40 12						
7 8 9	Grindstone Island. Etang du Nord Cape Mull. Hospital	1				48 12 13	1500 360 390	6	36	25	20					•••	
10 11 12 13	Allright Island. House Harbor Pointe Basse L'Anse à Elie South Beach			16,600		46 5 13 24	150	• • • •	330 12 26 60	15 35	8						
14	Coffin Island. Grand Entry Harbor	ļ				15	500	6	36	31	4				{ 		
15	Bryon Island.	ļ				15	450	8	48	32	8	ļ	 -• ••				
16	Entry Island.	18	701	22,500	<u></u>	7 306	210 9,296		1,164	14 816				\ \ \	 	 	-

kinds of Nets used, kinds of Fish and Fish Oils, &c., &c -- Continued. ISLANDS.

NETS AND SEINES.

]	Herri Seine	ng s.	Hei	rring I	Vets.	M	ack Sein	erel es.]	Maeker Nets.	el) (Capel Seine	in s.		aune Seine		s	eal Ne	ets.	Bru Fis eri	sh-
No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Yards.	Value.	No.	Value.
	\ 	\$	ļ	ļ	\$			\$			\$		į	Ş			\$			\$		\$
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••	• • • •		29 2 	1450 50	250 20		•••	•••	8	400	80			••••				38	22 80	1200	••••	
: : :			2 4 18	80 160 720		• •			 2 8	100 400	20	}	180					 4 12		1200 360		
٠.		••••	13	520	104			 			 							65	3700	1900		
٠.			7	280	56				12	600	120							18	1080	1000		
1	200	300	165	7535	1462	-	-		311	15,550	3016	<u>-</u> 5	300	390				175	10240	5710	···	

RETURN OF FISHING STATIONS, kinds of Vessels, number f Men, MAGDALEN

	i	1	= ===	1	1	l 1	<u> </u>		1	= =	====
		ured).	ce), lbs.	be.	boxes.	Summer Fishing.	Fall Fishing				
Νo	Name of Station.	Salmon, barrels, (cured).	Salmon, (fresh in ice), lbs.	Salmon (in cans), lbs	Salmon, (smoked),	als.	als.	Haddock, quintals	tals.	arrels.	arrels.
		lmon, b	lmon, (f	lmon (in	dmon, (s	Cod, quintals.	Jod, quintals	addock,	Ling, quintals.	Halibut, barrels.	Herring, barrels.
		82	S _S	- 82 - 82	S _S	ŭ		H	Ë	Ħ	<u> </u>
	Amherst Island.					!			i		
1 2	Pleasant Bay & Amherst Harbor					1342 833			• • • •		$9850 \\ 133$
3	Mill Cove] '			• • • •	325 1419	43			••••	27 218
4 5	West Cape					163					48
	Grindstone Island.										
6	Etang du Nord	····			i 1	2321	1200				$\begin{array}{c} 664 \\ 82 \end{array}$
7 8	Hospital					58					118
	Allright Island.				 						
9	House Harbor				• • • •	4510					115 40
10 11	L'Anse a Elie	ļ				64					118 353
12	South Beach					330		••••		••••	999
	Coffin Island.							 		,	
13	Grand Entry Harbor	ļ		·····	····	293		ļ			218
14 15	Bryon Island		·····			378 70					137 16
10	Total					12112	!	_			12137
		1			1	1		1		1	

kinds of Nets used, kinds of Fish and Fish Oils, &c., &c.—Continued. ISLANDS.—Continued.

.80						nds				-		Oı	LS.		Fish t	SED AS	Man	URE.
Smoked Herring boxes.	Mackerel, barrels.	Trout, barrels.	Sardines, barrels.	Eels, barrels.	Tunny, barrels.	Cod Tongues and Sounds barrels.	No. of Seals.	No. of Seal Skins.	No. of Whales.	No. of Porpoises.	Seal Oil gallons.	Whale Oil gallons.	Porpoise Oil gallons.	Cod Oil gallons.	Herring barrels.	Capelin barrels.	Cod Roes barrels.	Smelt barrels.
••••	2942 169 132 181 114										2460			550 505 144 700 98				
••••	885 62 200						115	115						2478 20				
••••	134 38 150 812						3234 148 94	3234 148 94						2435 25 164				
• • • •	413 317 20	 					25 3	253 83						103 145 20				
••••	6560			<u> </u>			4555	4555			2460			2375				

RECAPITULATION.

VALUE OF THE DIFFERENT FISHERIES OF THE MAGDALEN ISLANDS DIVISION.

Summer Cod fishery	1,72 12,13 6,56 4,55 7,39	Barrels Gallons	@	5.00 10.00 6.00 0.50 0.50	\$ 60,560 8,640 60,685 65,690 27,330 3,697 10,957	00 00 00 00 50 50
do	do	1873			191,336	
	Increase			-	46 224	00

STATEMENT of the names, tonnage, etc., of the vessels which went sealing during the Spring of 1874.

Date of departure.	Name of Vessel.	Master.	No. of Tons.	No. of Men.	No. of Boats.	No. o Seals.
Delaney'	Archangel A. Painchaud Dolphin President Stella Maris Arctic Temperance Mary Jane Amelia Lion Esperance	Vigneau. Jomphe Arseneau Rechard. Turbide Arseneau Chiasson Arseneau Boudreau Turbide Rechard Lapierre Chevrier	43 40 36 52 30 47 52 36 34 48 41 51 39	10 10 10 10 10 10 10 10 10 10 10 10 10 1	444444334	#00 200 310 25 200 315 400 580 404 Lost in the ice. 350 300 360

Herring Fishery.

Pleasant Bay and all the coves on the coasts of Magdalen Islands were swarming with herring this spring and traders being this season prepared to supply the salt required, fishermen were enabled to pickle the quantity of fish necessary for their provision Herring appeared in the Bay about the 2nd of May.

Nineteen schooners were employed in this fishery last spring, to wit: one from Magdalen Islands, thirteen from the Maritime Provinces, and five from the United States, all of which completed their loads in a very short time. 9,500 Barrels of herring were this year prepared at the Islands; 4,500 of which were exported to the United States. In 1873, notwithstanding the abundance of fish, there were only 4500 barrels prepared in all.

RETURN of the number and Tonnage of Vessels, with the Boats, Men and Seines, engaged in the Spring Herring Fishery at Magdalen Islands during the season of 1874.

Name of Vessel.	Master.	From Whence.	Tons.	Men.	Boats,	Seines.	Barrels of Fish taken
Thetis Nellie H. Commodore Fleetwing H. S. Boynton Lone Star Exchange Carrie W Janet Josephine Anemone Dove	Richard Malloch Twitcher Coolidge Davis Thompson Slavenwhite Tearbury Bigger Cheverie Hamilton McKay Mauthorne Cormier Godet Chiasson	Lamoine, U. S. do do do Halifax East Port, U. S. P. E. Island do do do do Magdalen Islands. Cheticamp do	53 41 78 40 52 59 45 86 62 42 40 13 25 33 25 12 12	6 7 7 6 7 7 5 7 4 4 4 3 3 4 4 4 5 5 5 5	4 3 3 2 2 4 3 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	900 650 1100 600 700 1100 600 700 1,100 450 150 160 300 200 50 60 40
River Dale	Hyson		789	104	38	$-\frac{1}{7}$	520 9,580

RECAPITULATION.

	Vessels,	Tons.	Men,	Boats.	Seines.	Barrels of Fish taken
From United States	5	306	38	13	2	4,500
do Nova Scotia	8	305	44	18	4	3,520
do P. E. Island	5	153	18	5	· · · · · · · · · · · · · · · · · · ·	1, 360
do Magdalen Islands	1	25	4	2	1	200
Total	19	789	104	38	7	9,580

Mackerel Fishery.

The storm which caused so much damage to salmon and cod fishermen on the coasts of Gaspé, Bonaventure and Labrador also destroyed almost all the fishing gear for mackerel belonging to Magdalen Islands fishermen and to strangers, which could not be removed previous to its fury. For this reason although fish were abundant, the yield of the fishery was small. This storm put an end to the fishing season which had begun on the 7th June. It occurred on the 18th June, when 60 boats from the Islands and 15 schooners from the United States were engaged mackerel fishing. Each of these boats was provided with 5 nets of 25 fathoms each. The schooners had about 900 nets altogether. Each net is valued at \$20. Some of the schooners lost as many as 100 nets. The average yield of the fishery was 8 barrels for each boat, against 30 in 1873. Notwithstanding this storm, the mackerel fishery would have been better, had fishermen begun earlier; the fish having been in the Bay for eight days before they began setting their nets.

Notwithstanding that the entrance to Amherst Harbor has been dredged to a depth of 12 feet, we were compelled, owing to the draft of La Canadienne to remain at anchor in Pleasant Bay during the whole of this dreadful storm from the 18th to 22nd June, to the great anxiety of our crew. Fishermen say the wind was as strong as had been during the gale of the 24th August, 1873. Had we not been somewhat sheltered against the wind by the sand banks, we would most likely have shared the fate of two other schooners, the "Victory" Capt. Vigneau, and the "Swan" Capt. Harvey, of Halifax, which broke their chains and drifted on the rocks of Grindstone's Island, when the crew was rescued with great difficulty.

The fall mackerel fishery was better than the spring fishery; fish being abundant and weather favorable in Pleasant Bay. Several boats caught as much as 60 barrels. In spite of this abundance, only fifteen American schooners were engaged fishing around Magdalen Island, owing probably to the fact that fish were abundant this season on their coasts.

The yield of mackerel fishery amounted to 6,569 barrels against 5,497 in 1873, an increase of 1,663 barrels in favor of 1874. Mackerel sold last fall for \$6.00 per barrel at the Islands.

. Cod Fishery.

Codfish was not quite so scarce at Magdalen Islands as on other parts of the Gulf, but yet it was by no means abundant. The fish appeared only about the 15th of June and this added to the contrary weather which delayed the beginning of this fishery was the cause that the yield was not very large. The schooners which usually repair to the coast of Labrador for their loads of codfish made a trip which was one half longer than usual and still brought but three forths of a load. The catch made by fishermen from the Islands for this year is 13,840 quintals, against 17,048 in 1873.

Settlers on the Islands in spite of all drawbacks were better off this fall than usual owing to good crops and to the abundant yield of the herring and mackerel fisheries.

RETURN of the Number and Tonnage of Vessels with the Boats, Men and Nets employed in the Spring Mackerel Fishery at Magdalen Islands, and the quantity of Fish taken during the season of 1874.

Name of Vessel. Master. From whence.	Tons.	Men.	Boats.	Nets.	Brls. of Fish taken.
one Star Nickerson Halifax illian Proctor Pt. Richmond wo Brothers Henley Spry Bay evina & Elizabeth Hawes do ohn Thomas Gaston Halifax Villiam Ferguson Tangier nnie Belle Leslie Spry Bay liza A Hawes do efiance Jackson do ictory Colford Pt. Hawkesbury rcola Purcell Pt. Mulgrave melia U Langley Pt. Hawkesbury lary Ellen Reeves Pt. Mulgrave Martin Murphy Ship Harbor E. Cove Keating Pt. Mulgrave Total 15 vessels	29 44 23 23 36 22 41 39 24 37 37 14 22 20 54	7 8 7 11 8 6 10 11 7 9 8 3 6 10	3 3 2 5 5 3 2 4 5 5 3 4 2 1 3 3 2 4 4 6	24 109 60 100 60 16 100 100 80 36 30 60 30 50	32 150 150 240 130 80 260 230 170 150 100 60 80 250

RETURN of the Number and Tonnage of Vessels with the Boats, and Men engaged in the Seal Fishery at Magdalen Islands, and the Number of Seals taken during the season of 1874.

Name of Vessel.	Master.	Tons.	Men.	Boats.	No. of Seals taken.
Delaney Archangel A. Psinchaud Dolphin President Stella Maris. Arctic Temperance	Jomphe Arseneau Rechard Turbide Arseneau Chiasson	43 40 36 52 30 47 52 36 34	10 10 10 10 10 10 10 10 10	4 4 4 4 4 4 4 4	400 200 310 25 200 315 400 580 404
Jane Amelia Lion Esperance Jenny Lind	Rechard	48 41 51 39	10 10 10 10 10	4 4 3 4 51	Lost in the ice. 350 300 360 3844

Total Exports of Fish and Oil from Magdalen Islands, showing where the same were so exported during the season of 1874.

Fish and Oil.		Dry Codfish.	Pickled Codfish.	Herrings.	Mackerel.	Cod Oil.	Geal Oil.	JiO əladW	Seal Skins.	Value,
Foreign. To United States.		Cwt. 50	Bbls.	Bbls. 4500	Bbls. 290	Galls. 150	Galls.	Galls.	No.	6515 250
Fotal Foreign		20		4500	290	150	200			6765
Coastwise.										
To Province of Quebec do do do Nova Scotia do do New Brunswick do do P. E. Island		2038 11 <i>427</i> 295	370	330 3680 460 2014	145 5733 140	3430 2575 530	8448		3749	16084 94438 800 5622
Total Coastwise. Add do Foreign		13760	370	6424 4500	6018 290	6535 150	21390		3799	116944 6765
Grand total	:	13810	370	10904	6308	6685	21890		3799	123709

73

GENERAL STATEMENT of the catch of Fish by Magdalen Islands Vessels in 1874.

9					1::1:
		The Tri			
	.10	tudilaH.			:: ::
	Cod Oil.	Galla, of	150 8 80 50 50 8 80 8 80 8 80 8 80 8 80 8	230 230 230 180 240 240 300 2435	2460 505 16170 2435 18630 2940
	Seal Oil.	Galla, of	1260	2000 1000 125; 1000 157; 2000 2900 2900 2900 1750 1800	2460 16170 18630
١	- Sarring.	H to aldH	63 63		63 63
١	Mackerel.	Bbla. of	2 2		63 63
	eal Mets in				
	Haddock.	Cwts. of			
	Codfish.	Cwts, of	200 300 250 100 1100 1100	4450 4450 4450 4450 4450	1100 4450 5550
	eals.	S to .oN	300	25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0	, 610 3234 3844
	Capelin ines.	lo .oV	77	H	61 00 10
ļ	Mackerel ets.	lo .oV N	2 :: 2		62 63
,	Herring ets.		: : : - : : -		H : H
	Herring ines.	to .oN Se			NOI
,		IS 10 . oN	122 100 4 7 7	122 122 122	RECAPTIULATION 11 51 47 44 134 122 55 185 169
	spermen.	Mo . oV	01 40 10 10	134 134	134 134 185
		Sailors.			[: : : S
	- 8:	Flat Boat	416111	सम्मर्गन्यसम्बद्धाः स	HE 114 135
	ests.	Fishing I	884199 tl	20 20 20 20 20 € 20 20 4 15 E	5 8 8
		. ogennoT	12 12 12 200 200 200	24 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	203
	ввоив,	Name of Outfitter.	C. Chiassen D. Devos. J. B. F. Painchaud do G. Cormier J. B. F. Painchaud Total 6 Vessels	I. & R. Delaney F. Arsenent & Son. Win. Johnston W. Jeslie & Coy F. Arsenent & Son. O. J. Jeslie & Co. T. Arsenent & Son. J. Cheverie D. Terrien J. & R. Delaney Total 13 Vessels.	6 Vessels. 13 do 19 do
	ANHERST HAV	Name of Vessel.	B. perance. Typhoon A. Painchaud Ploughboy Marie Louise	Bouse Harber. Delany Bouse Harber. Archangel Arctic Temperance Mary Jane Anelia Jane Anelia Jane Anelia Jane Anelia Jane Hash	Amherst Harbor Mouse Harbor Grand Total

RETURN OF FISHING STATIONS, kinds of Vessels, number of Men, GENERAL RECA

No.	NAME OF PLACE.		Ves	sels.		Fish: Bos	ing.		Flat Boats	Fishermen.	of Shoremen.		Salm	on N	ets.		Coo Sein			Herring Seines.
		No.	Tons.	Value.	No. of Sailors.	No.	Value.		z, ;	Value. No. of F	No. of SI		No.	Yards.	Value.	No.	Yards.	Volue	No.	Yards.
4	C. Gaspé. Bonavent. Labrador. Magdal. I Anticosti	23 80 43 18 10	1348 701 466	36350 37810 22500 8750	454 145 29	340 563 306 152	64	137 187 196 195	372 35 473 55 194 1 153 15	\$ 344 230 344 230 358 52 242 123 64 81 533 27	5 50 8 62 6 54 3 12	08 26 11 25	772 7 218 2 15	386	\$ 7150 15060 12740 95	21 1	60	35	24 14 12 2 24	2 5040 9 2350 1 200
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APPENDIX No. 4.

SPECIAL REPORT ON SEINING CODFISH.

On Board La Canadienne, August 6th, 1874.

To the Hon. A. J. SMITH, Minister of Marine and Fisheries.

SIR. —In reference to the petition from the Jersey owners of large fishing establishments on the shores of the Gulf of St. Lawrence, praying for the prohibition of the use of seines for the catching of cod fish, I beg to make the following remarks, which I trust will enable your Department to deal in a fair way with the petition. First and foremost, I beg to state that I know of only two seines on the shores of the Gulf where Jersey firms have established fishing posts, one belongs to a Jersey firm (Collas & Co.), and the other to Mr. Touzel, from Sheldrake, on the north shore, and these seines are used perhaps once in two years. There are five or six other cod seines in the Pacachoo division; these belong to fishermen settled on the coast, who provided themselves with such gear a couple of years ago, because they understood that it was impossible to carry on cod fishing on the Labrador coast, with any hope of success, without being supplied with seines, and in this last division there are no Jersey establishments; the nearest Jersey establishments (DeQuetteville and LeBoutiller & Co.) the owners of which have signed the petition, are at Blanc Sablons, which place belongs to Newfoundland, and at these establishments they keep seines and crews for their seines which they use and have used 20 years past. It is true that seining is prosecuted on the limits of Canada, adjoining Newfoundland by some of our own fishermen, by Newfoundlanders, and by the employes of Jersey firms on the Newfoundland side; but the facts and reasons alleged in the petition to induce our Parliament to prohibit seines are so erroneous and exaggerated that I am led to believe that your petitioners had more in view to crush at its beginning a mode of fishing which the settlers on our coasts are now adopting, and which will certainly render them more independent from the Jersey trade than the protection of the fisheries. But, supposing the petition to be considered from a disinterested point of view; a short glance at the fishery as it is practised on the Labrador coast will show that Jersey firms or the country have nothing to fear from the use of the seine as a ruining agent of our fisheries.

On the north shore and on the coast of Librador, the cod approaches the shores when the time for reproduction has arrived, first after herring and later after capelin, which cod feeds upon, but the time of its stay on the shore and in shoal water is very short, not exceeding six weeks, and often three weeks; and it is only during the period that cod fish is after capelin that Labrador fishermen can fish, for after that period cod resort to deep water, where fishermen can no longer search for it, because they can-not anchor their boats to fish, and tides and currents are too strong. This short duration of the fishing season on the north shore, and especially on the Labrador coast, naturally indicates that fishermen must resort to some more expeditious way of securing their catch than on the south shore, where the fishing season lasts six months. When settlers on the Labrador coast were living on the rich product of salmon and seal fisheries, cod fishing was almost unknown; but now that this last industry is the only means of gaining a livelihood, they must get the fish by any No time is to be lost, as fish is not long on the coast; one day lost renders more gloomy the prospects of the poor fisherman, for on the rocky and isolated coast of Labrador, if the fisherman fails to get fish, where will be procure assistance? state here of fishermen settled on the Labrador coast applies also to those who come in schooners from Newfoundland, the Maritime Provinces, and from our own Province; they are generally poor people who must make their voyage in a few days, as

fish do not wait for them, and if they are not supplied with the necessary implements to catch fish under all circumstances, they lose their summer, and the expenses of the outfit bring them into debt for many years. This will be the case this year for about 100 vessels which resorted to the coast of Labrador to fish without being provided with seines. Cod usually visit the north shore in great abundance, but this abundance is not Sometimes they take the bait most readily, as always a guarantee for a good fishing. for six years past, but sometimes they do not bite at all, as was the case in most of the fishing places on the north shore this season, thus rendering inevitable the loss of the season to fishermen who would have resorted to the hook and line only to secure their catch and the supply of their family. On reading the petition, the Department might be led to infer that on the north shore and on the coast of Labrador seines are used as often as hook and line, as well as in most of the fishing stations along the coast, but this is a great As I stated before, I know of only two seines on the north shore, at Sheldrake. and a few more in the Bonne Esperance division. The number of seines is increased during the fishing season in the Bonne Esperance division, but these are used only when fish do not bite, except those which are worked by the servants of the Jersey firms, which are kept on purpose for seining.

When cod has been two weeks on the coast, it usually follows capelin in the bays, and it is in and out of bays that fishermen try to catch them in seines. costly that they cannot be used except under the most favorable circumstances. must be shoal and calm water, smooth bottom, no current or tide, and even then fish will escape. The time for seine fishing generally lasts one week, and occassionally there are years when no fish will be taken by the seine. Seining is such a difficult pursuit, that when cod bites, a vessel is more quickly loaded by fishing with hook and line than with The greatest argument which the petitioners bring forth against the use of the seine, is that fish are so often lost in them, that if this mode of fishing is not put a stop to, cod are threatened with destruction in a year or two! Well, this is a most, exaggerated statement, to say no more. Your Department will surely understand from what I said about the duration of the fishing, the cost of a haul of the seine and its difficulties, that when the owner of a seine has secured a good catch, he is so much pleased that he spares no pains to save it, and that if it be lost, it must be by uncontrollables Such accidents happen no doubt, especially when seining takes place in a rough cove, and a sudden gale sets in, but this is of scarce occurrence, and happens perhaps once in two or three years, and is looked upon by fishermen as a great misfortune; the fish being not only lost, but also the bag or seine, which cannot be replaced in time for the These losses and accidents, although to be regretted, seem to me to be more excusable than the loss of fish which is thrown off the cod stages at large establishments. when fishermen engaged by the hundred bring more fish than can be split before decay takes place, and this has occurred many times at the large establishments at Blancs Sablons.

Having acquainted your Department with the use of the cod seine, and how far this practice is carried on in the Province of Quebec, I beg to add that experience completely contradicts the fact which the petitioners want to establish—that is, that seining will ruin the fishing grounds. Should we consider the immense power of reproduction with which cod is endowed, and its extensive nutritive grounds, it seems that, besides diseases that might annihilate the species, cod defy all human agency of destruction, so that physiologically speaking it is more than ridiculous to pretend that a few hauls of the seine at Blancs Sablons would ruin this fishery on the shores of the Gulf. Seining has been practised on the Lower Labrador, which belongs to Newfoundland, for the past 100 years, and cod fishing has always been good; last year was one of the best seasons on the coast; this year there were plenty of fish, but they would not bite.

On the coast of Newfoundland, which is fished by the French, cod is taken with seines, trawls, jiggers, and hook and line. If cod were likely to be ruined by any mode of fishing, they certainly would have disappeared from that coast a long time ago, these practices having been carried on since the French have enjoyed the privilege of fishing on.

the Newfoundland coast, and yet we are to hear that the French have not made a good voyage; this season particularly being one of the best that has ever been seen on the French side of the Strait. Now, if we compare the statistics of the cod fishery on the north shore and Labrador for the last 20 years, we find that in 1852 the catch of cod amounted to 9,980 quintals, in 1871, to 51,668, in 1872 to 60,591, and in 1873 to 92,000, besides as many quintals caught by crews of schooners from the Provinces and elsewhere; thus showing a continual increase in the catch of fish, notwithstanding the seining at Blancs Sablons; and from whatever part of the Gulf one hears of, it is stated that fish are as abundant as they were 100 years ago, if not more.

It is true that the same shores are not visited every year by the same number of fish, and sometimes fish left for many years spots where they used to be found in great quantities, and resorted to other places. I have read somewhere that cod had disappeared for 30 years from a part of the coast of Norway, where they formerly abounded, and came

back after that period as abundant as ever.

The migration of fish on our coasts is regulated by several circumstances, such as

weather, winds, and especially migration of bait.

In 1867 there was no cod to be caught on the north shore and Labrador, for there were no bait. There existed during that summer a kind of disease which destroyed the bait in immense quantities, so much so that shoals of dead capelin or lance were met by vessels sailing on the coast, and had it not been for the supplies sent by Government, several persons would have died.

I might send you the evidence of hundreds of experienced fishermen to sustain the present remarks, but not having been requested to do so, I thought that the three following affidavits would enable you to better understand my report and to answer the

petition.

The Jersey gentlemen refer in their petition to the trade and to the loss which the ruin of the cod fishery by seines would bring upon them, but I cannot find how this end could be arrived at, since it is proved that seines cannot ruin the fishing grounds, a

fact which they know as well as Î do.

I know only one way in which the Jersey trade might be affected by the use of seines, and it is this: fishermen with the help of seines in securing each season a good catch of fish, might become more independent, and would soon relieve themselves from the grasp of the Jersey houses; that is, perhaps, the consequence they fear most, and against which they want to protect themselves by their petition, but it is a result which the Government ought to encourage as much as possible, for independent fishermen trade in the Dominion, exchange their fish for goods and supplies from our merchants, occasioning thus a large circulation of money which benefits the whole country, whilst the Jersey trade is carried on in foreign countries, and leaves here but poverty and a kind of desolation and backwardness in places most favored by nature.

From what is stated in this report, and after a most attentive examination of the case, the conclusion is easily arrived at; and I cannot recommend the Department to prohibit the use of seines on the shores of the Gulf. Abuses may occur—for instance, seines might impede hook and line fishing, but this inconvenience could very easily be

settled by a regulation of the Department.

Trusting that these remarks will meet your approval,

I have the honor to be, Sir, Your most obedient servant,

N. LAVOIE.

To the Honourable Members of the Canadian Legislative House of Assembly.

We the undersigned land owners and proprietors of fishing establishments on the coasts of Labrador and Canada, humbly lay before your Honourable House the following petition, and pray you to redress the grievance which has arisen in our fishing trade:—

Your petitioners have been compelled to incur an enormous outlay in building and forming establishments on the shores, for the purpose of catching and curing codfish.

Your petitioners catch fish by the use of the hook and line only, thereby avoiding

the destruction of more fish than they can dress and cure.

Within the last few years your petitioners have suffered grievous losses by fishermen coming from St. John's, Newfoundland, and from elsewhere, and using fishing nets called seines.

Your petitioners beg to submit to your Honourable House, that this mode of fishing s attended with a great destruction of fish, inasmuch as many more are caught than can be dressed.

Large quantities of fish are caught in these seines, the fish are then secured in the bags of the seine, which are made fast, and moored in the water and left there, whilst the fishermen go and catch still more. And your petitioners wish to call the attention of your Honourable House to its being a well known fact that the fishermen who use these seines do not save or dress more than two-thirds of the quantity caught, and every time it comes on to blow heavily the bags of the said seines are driven ashore, and all the fish therein entirely lost.

That your petitioners cannot but feel grieved and annoyed by seeing large quantities

of fine mother fish, during the spawning season, lost and rotting on the shore.

Your petitioners are thoroughly convinced that such a mode of procedure will, in the course of a year or two, annihilate the codfishery; scarcity being already severely felt on the North Shore.

Your petitioners beg to call the attention of your Honourable House to the calami-

ties that must arise from this mode of seining fish.

Merchants trading and doing business on the shores of Labrador and Canada will be placed in a critical position, the heavy losses which must necessarily ensue, will compel them to withdraw altogether from these shores, and thus the inhabitants, who are entirely dependent on the fishing trade for their subsistence, will be reduced to a state of pauperism.

Your petitioners are also convinced that if immediate steps are not adopted by the Legislature to prevent it, the south coast of Labrador and the shores of the Gulf of St. Lawrence will share the same fate.

Your petitioners, therefore, do humbly urge your Honourable House to adopt such steps as in your wisdom you may deem fit, to prohibit as soon as possible the use of seines in fishing on these shores, and to permit the use of hook and line alone.

Your petitioners, therefore, do humbly pray that your Honourable House will take

this their humble petition into your serious consideration.

And your petitioners, as in duty bound, will ever pray, &c., &c., &c.,

RAWLIN ROBIN,

Manager for Chas. Robin & Co., and Philip Robin & Co.

J. BRIARD,
P. P. ED. LEFEUVRE,
PH. LA PONT,
ALEX. RIVE & Co.,
ED. VAUTIER,
WM. FRUING. & Co.,
PHILIP HUELIN, & Co.

LE BOUTILLIER BROS,
P. P. CH. DE QUETTEVILLE & BROS.,
CHAS. LE QUESNE,
JOHN & ELIAS COLLAS,
JOHN LE GRESLEY,
DE LAPARELLE BROS.,
GEO. BALLEINE,

Dominion of Canada,

DEPARTMENT OF MARINE AND FISHERIES,

OTTAWA, 20th. February, 1875.

Sir,—The special report made by you regarding the use of seines for catching codfish on the Labrador coast has been considered with reference to further representations made on the same subject by petitions from certain Nova Scotia fishermen. I am to refer to you for further observations, the substance of one of these memorials, which bears the names of about 600 fishermen, from the County of Lunnenburg in Nova Scotia. Copy overleaf. Your attention is drawn to the fact that, while in your remarks on the request of the Jersey firms to abolish seines for codfish, you appear to think that their demand arises from a desire to maintain in their own interest the hook and line fishery, because the seines enable other fishermen independently of them to prosecute cod-fishing on the Labrador coast successfully, and that besides being an absolute necessity to the residents, it is entirely in the interest of the fishermen who frequent that part of the coast from the other Gulf Provinces, the present demand for prohibition of seines comes from fishermen resorting there each season from Nova Scotia. There is an anomoly and something of a contradiction here. Please favour me with your views.

I am Sir,

Your obedient servant,

(Signed)

W. F. WHITCHER.

For the Honorable Minister of Marine and Fisheries.

N. LAVOIE, Esq., L'Islet.

To the Honorable Minister of

Marine and Fisheries of the Dominion of Canada:

THE PETITION of the Fishermen and others of the County of Lunenburg, in the Province of Nova Scotia:

HUMBLY SHEWETH

That your petitioners respectfully beg leave to bring to your notice that the seining of codfish has been practiced for several years on the Labrador coast, within the limits of the Dominion of Canada by fishermen of Newfoundland; and that the said practice of cod seining is very prejudicial to the interests of the Dominion fishermen engaged in the catching of cod on this coast, as well as injurious to the propagation of these fish, as will appear from the following reasons:

1. The parties using these seins often throw them around the boats of Dominion fishermen when engaged in taking the cod with hook and line, and by so doing disturb them at their work, and compel them to haul up and remove, thereby causing much loss

of time, and frequently preventing them from getting their fares for the day.

2. These seines being sunk to the bottom with lead disturb the grounds and tend to cause the fish to remove to some other place where they may be free from such disturbance

in feeding, &c.

3. Large quantities of cod are enclosed in these seines at one haul, and the number of hands engaged in working them are not sufficient to split and dress the fish quickly, in consequence of which large numbers of them mesh and die before they are dressed, and are then thrown out and float about the ocean, and land on the shore in a decomposed state, thereby causing much destruction to the fish, as well as tending to keep them away from the localities where such seining is being carried on.

4. The fishermen of this County, and of Nova Scotia at large, who resort to these waters, use the hook and line only in the capture of the cod, and they believe that to be the only proper mode of catching these valuable fish, and your petitioners therefore, earnestly press that citizens of Newfoundland OR ANY OTHER COUNTRY should not have

liberty to capture fish in Dominion waters in any other mode than fishermen of the Dominion do, in a word, that they should not claim privileges in this respect that our fishermen do not want, and firmly believe to be injurious to the fishing interest for the reasons herein given.

5. And lastly, this practice is carried on within three (3) miles of the shore, and therefore comes under the jurisdiction of the ominion Government; and in conclusion, your petitioners could advance other reasons for the abolishing of this practice, but they think that sufficient have been set forth to show the necessity for a law being enacted, or sufficient measures being put in force to prohibit this pernicious practice of cod seining in the future. Respectfully requesting your influence and best exertions to have such prehibition effected as soon as possible.

L'Islet, 11th March, 1875.

Honorable A. J. Smith, Minister of Marine and Fisheries.

SIR,—I have the honor to acknowledge the receipt of a petition from fishermen and others of the County of Lunenburg, in the Province of Nova Scotia, representing that the use of cod seines as practised on the coast of Labrador, is injurious to the fish and asking the prohibition of this mode of fishing for reasons set forth in said petition. Upon this document I have the honor to report as follows:—

- 1. The seeming contradiction noticed in my previous report upon a petition of a similar nature, from Jersey firms engaged in the cod fishing on the north shore, is more apparent than real. Although both petitions urge the prohibition of this mode of fishing, there is a wide difference in the nature of the reasons adduced. The Jersey firms, for instance, tried to prove that the use of these fishing engines was so injurious, that a total extermination of the species would be the inevitable result of their use after the fishing season of 1874. Had this conclusion been based upon facts or experience, I would have been the first to acknowledge the advisability of complying with the petitioners' request, but I am led to believe that my previous report sufficiently dispels all such apprehensions. The present petitioners appear to have a better knowledge of the matter; they do not represent seines as such deadly engines of destruction as represented by Jersey firms; they merely urge their prohibition on account of its intertering with hook-and-line fishing.
- 2. Whilst desiring to afford every convenient facility to seine fishermen, as evinced in the report above alluded to, I will not deny that this mode of fishing may sometimes interfere with the use of hook and line. This is inevitable, and instances of a similar nature occur every day in other worldly pursuits. But the remedy is very simple. Should it be found upon enquiry that the petitioners have just grounds of complaint, nothing is easier than to curtail the action of seines in such a manner that whilst their mode of operation will be very slightly interfered with, hook-and-line fishermen will at the same time be sufficiently protected in their mode of fishing. A fishery regulation prohibiting the use of seines within a radius of half-a-mile of where boats are anchored and fishing, or during the afternoons would, I feel sure, obviate all causes of complaint and be acceptable to both parties.

3. The allegation that seines disturb fishing grounds and cause a disappearance of the fish, is open to doubt. It may be so, but as a fact, according to my knowledge, is first from being proved. My previous report above alluded to speaks exhaustively on that point.

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4. The loss of fish occasioned by the use of seines is an accidental and necessary result of the use of such engines. Such losses are not confined to seines only, but are daily

noticed on the best conducted stages supplied by hook and line.

5. The petitioners evidently do not mean all that is alleged in their petition; and the Department is undoubtedly aware that petitioners often exaggerate things in order to strengthen a point which they desire to carry. Should this prayer be granted in its present shape, I beg to remark that it will greatly injure the prospects of resident fishermen on the coast of Labrador who, having been for a long time prejudiced against cod seines, have now become convinced of their advantage, and have gone to a large expense in providing such fishing gear as is absolutely necessary to secure the supply of fish requisite for their wants and those of their families on this barren coast of Labrador, where fishing seasons are so short and so uncertain.

6. The Lunenburg fishermen do not appear to have become reconciled to the use of seines. That time and observation will bring a change in their manner of thinking I have no doubt; since the same result has been experienced amongst our own people.— Meanwhile, I do not see why one class of fishermen should be prevented from using certain fishing gear, the use of which they find most alvantageous, since statistics, observation and practical experience have proved this mode not to be injurious to the propagation

of fish.

7. Putting all these considerations aside, what could be the practical effect of abolishing seines on our coasts, where they are used for about thirty miles only, (say from Ste. Augustine to Blanc Sablon) if they are allowed on the coast of Labrador, from Blanc Sablon downwards, belonging to Newfoundland, where most of the fishing fleet resort?

8 After duly considering the present petition, I do not find that its allegations differ in principle from my own views relative to protection and propagation of fish, and I would recommend, as a remedy for the abuse complained of, definite regulations on the time and mode of using cod seines, so as not to interfere materially with hook-and-line fishing.

I have the honor to be, sir,~

Your obedient servant.

(Signed,)

N. LAVOIE.

APPENDIX No. 5.

SPECIAL REPORT ON THE SEAL FISHERY.

OTTAWA, 3rd February, 1875.

To the Hon. J. A. SMITH,
Minister of Marine and Fisheries.

SIR,—With reference to your letter of 29th ult., relative to the protection of the seal fishery, I beg to state that though it is not yet demonstrated by accurate statistics that the seals, or at least the species which is hunted in the spring on the ice of the gulf, has diminished in the Province of Quebec, or in the northern seas, it is however almost certain that if sealing expeditions continue to increase in the same ratio as they have done for the past ten years, and if the steamers are allowed to leave port and to kill the seals as early as they have done until now, destroying indiscriminately both males and females, even when the latter have not yet brought forth their young ones, or when they are unable to provide for themselves, one will soon have to deplore the annihilation of the species as already witnessed with regard to sea cows, which formerly were so abundant in the gulf, especially around the Magdalen Islands. There are some fish whose infinite power of reproduction seems to defy all possible means of destruction, but it is not so with certain kinds, such as mammiferous animals which are found only in determined localities, and whose reproductive powers are confined to one or two young ones per female; such is the case with the seal family, and experience has proved that if a species like the seal cannot be destroyed all at once, it may at least be diminished to such an extent that there would be no inducement to carry on hunting or fishing as an industry.

A moment's reflection will be sufficient to convince any one that such will be the fatal but unavoidable result of too early expeditions, and indiscriminate hunting. In order to avoid this danger, no delays should arise in the adoption of some means to protect seals in the same manner as the fishes of the gulf. A close season has become necessary, and I heartily approve the resolutions proposed at a meeting held in Liverpool.

by a great number of persons interested in the seal fishery business.

Should these resolutions be adopted, sealing vessels will make only one trip on an average, and should they make two, the seals killed in both voyages will be equally profitable, as the young ones will have had time to grow; there will also be no danger for the young ones, because by that time they will be able to escape. I will, however, remark that the lawful time for our fishermen might be made to extend from the 1st of April to the 15th of May, their ships being slower than those of Newfoundland, which for the most part are steamships, and because also our vessels have a longer distance to travel before reaching the seal banks.

Should the number of seals be found to have diminished in the gulf, this must certainly not be attributed to the destruction made by our hunters, who seldom leave before the first days of April, where the large seals as well as the small ones can escape. The number of seals killed every year by our men is besides so small that it cannot have had

a great influence

Since 1852, the number of vessels despatched from Canadian ports, especially from Magdalen Islands and Esquimaux Point, which are now the only ports wherefrom sealing expeditions are outfitted, varied from 30 to 40 with a total average tonnage of 1,200 or 1,500 tons. The catch of these vessels did not exceed 12,000 seals yearly, except in 1863 when the same amounted to 23,000 seals. The total annual catch of our vessels, even in the best years, is therefore an average voyage, unequal to that of a steamer from Newfoundland.

In 1861, 350 vessels were outfitted in Newfoundland ports for the seal fishery, the crews of which amounted to 10,000 men. These vessels delivered to the trade 700,000 seal skins that year. Since that time vessels have increased one half, if not in number, at least in capacity and number of men engaged in the same industry. Steamers have replaced sailing vessels and the produce multiplied. It therefore follows that regulations for the protection of seals are principally required in Newfoundland, and that they should te observed in particular by fishermen from that country. In spite of the frightful destruction of seals which took place in the Gulf for the past few years, our oldest and most experienced fishermen pretend that our waters are as full of them as ever; this spring as many were noticed as ever before. The extraordinary catch made by Newfoundland vessels, and the almost uniform success of our fishermen since 1852, would seem to indicate no decrease in the species. On the other hand fishermen settled on the coast of Labrador, urge that seals were formerly so abundant there in the fall, they were noticed ascending the Gulf in numerous herds during whole weeks from the 15th of November to the 15th of December. Then was the time when those extraordinary catches at La Tabatière, Pacachoo and Mecatina were made; a single one of which might have been sufficient to enrich a man. During spring time when seals were descending the Gulf, a renewal of this good fishing occurred in Bras D'Or Bay and also in Belles Amours, but to day seals are hardly seen along the shores. After a run of five or six hours they are no longer seen, and should the fishermen be unprepared to stop them at the proper n ement the catch for the season is over.

How is all this to be explained?

No doubt that several causes may prevent seals from approaching the shores, but an occurrence of such a regular kind for the past 30 or 40 years, and especially since the outfitting of large expeditions from Newfoundland, must be accounted for otherwise. Can it be that seals being frightened dare no longer approach the coasts, but retire to the middle of the Gulf? Or have they been destroyed beyond the recuperative powers of the species, is what cannot be very well ascertained at present; but I am inclined to favor the latter supposition. At all events it is time that measures should be taken to check this downward tendency, thereby preventing a sure destruction of seal fishing and causing the ruin of merchants and fishermen engaged in that industry.

Before closing this letter I beg to add that I do not see any occasion for recommending any change in the mode of carrying on the seal fishery so far as our own fishermen are concerned, as I do not think that their mode of fishing has ever done any harm to the seal species, but I strongly recommend the Department to help as much as possible the enforcement in the Gulf of regulations similar to those passed at the Liverpool

meeting.

I have the honor to be, Sir,

Your obedient servant,

N. LAVOIE.

APPENDIX 6.

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RECAPITULATION.

VALUE of the different Fisheries from Point Levis to Cape Chatte.

\$ cta.	\$ cts
Cod Fishery 3,200 quintals, at 5 00	16,000 00
Herring Fishery 12,904 barrels 5 00	64,520 00
Mackerel Fishery	1,410 00
Salmon (fresh in ice)	4,493 00
Sturgeon Fishery 523 barrels 8 60	4,184 00
Bar and White Fish 8,492 doz2 00	16,984 00
Shad	2,058 30
Sardines 900 barrels 5 00	4,500 00
Eels 151,442 each 10	15,144 20
Mixed Fish 29 barrels 5 00	145 00
Fish used as Manure	194 75
Total value of the products of the Fisheries in 1874	129,633 25 78,453 00
Increase	51,180 25

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RECAPITULATION.

VALUE of the different Fisheries from Quebec to Bersimis.

	\$ets.	\$ cts.
Salmon (fresh in ice)	71,520 lbs at 0 05	3,576 00
Winnoniche	7,500 each 0 25	1,875 00
Sturgeon fishery	33 barrels 8 00	264 00
Bar and Whitefish	2,068 doz 2 00	4,136 00
Shad	2,250 each 1 10	225 00
Sardines	2 barrels	10 00
Eels	65,822 each0 10	6,582 20
Mixed fish	187 barrels 5 00	935 00
Fish used as manure	1,562 do 0 25	390 50
Total value of the prod do do	uct of the Fisheries in 1874	. 13,273 00

APPENDIX No. 8.

GENERAL Recapitulation of the Yield of the Fisheries on the North and South Shores of the River and Gulf of St. Lawrence, from Quebec to Blanc Sablon, and from Point Levi to Bay des Chaleurs, and in the Districts above Quebec, during the year 1874.

Quantity of Fish.	Prices.	Value. 1874.	Value. 1873
	3 cts	\$ cts.	\$ cts.
Summer Cod-fishery, 122,509 qntls	5 00	612,545 00	736,424 00
Autumn do 29,024 do	5 00	145,120 00	157,335 00
Herrings (pickled) 43,405 brls	5 00	217,025 00	104,310 00
do (smoked) 1,889 boxes	0 25	472 25	204 00
do (fresh water.) 20 brls	5 00	100 00	
Mackerel fishing 7,278 do	10 00	72,780 00	61,700 00
Haddock do 241 qntls	5 00	1,205 00	2,395 00
Ling do 43 do	5 00	215 00	40 00
Halibut do 312 brls	. 6 00	1.872 00	2,290 00
Salmon (pickled) 1,313 do	16 00	21,008 00	32,672 00
do (fresh in ice) 531,992 lbs	0 05	26,599 60	31,637 00
do (preserved) 280,402 lbs	0 25	70,100 50	3,600 00
do (smoked)			2,250 00
Lunge 430 brls	25 00	10,750 00	l
Winnoniche 7,500 each	0 25	1,875 00	
Frout, 134 brls	8 00	1,072 00	990 00
do (speckled) 10,000 lbs	0 10	1,000 00	1
Sturgeon, 559 brls	8 00	4,472 00	1,905 00
Sturgeon, 559 brls	2 00	22,720 00	49,512 00
Shad, 66,873 each	0 10	6,687 30	1,969 00
Sardines. 902 brls		4,510 00	4,350 00
Eels, 374,187 each	0 10	37,418 70	16,054 00
Pike, 60 brls	10 00	600 00	
Pickerel, 186 brls	10 00	1,860 00	
Tom Cod, 20,000 bushels	0 50	10,000 00	
Maskinongé, 500 each	2 00	1,000 00	Í
Seals 12,639 each	6 00	75,834 00	76,896 00
Lobsters (preserved) 254,908 cans	0 25	63,727 00	2,250 00
Mixed fish, 20,353 brls	5 00	101,765 00	3,112 00
Fish used as manure, 14,569 brls	0 25	3,642 25	5,128 00
Cod Tongues and Sounds 209 brls	7 00	1,463 00	1,421 00
Cod Oil, 97,709 gals	0 50	48,854 50	45,813 00
Seal Oil, 54,095 do	0 50	27,047 50	46,916 00
Whale Oil, 16,620 do	0 80	13,296 00	320 00
Porpoise Oil, 17 do	0 80	13 60	71 00
Total		1,608,660 20	1,391,564 00

A. J. SMITH,
Minister of Marine and Fisheries.

DEPARTMENT OF MARINE AND FISHERIES, Fisheries Branch, Ottawa, 1874. (Certified.) W. F. Whitcher.

APPENDIX No. 9.

SYNOPSES OF FISHERY OVERSEERS' AND GUARDIANS' REPORTS IN THE PROVINCE OF QUEBEC FOR THE SEASON OF 1874.

SOUTH SHORE DIVISION, FROM POINT LEVIS TO CAPE CHATTE.

Louis Caron,
Hermenegilde Martin,
L. E. Grondin,

Overseers.

The following comparative table exhibits the yield of the Fisheries in this division:—

	1868.	1869.	1870.	1871.	1872.	1873.	1874.
Value of Salmon (pieces)	32,242 30,117 350 11,702 3,100 160,242	5,758 26,987 13,135 369 10,262 4,600 99,500	9,574 16,249 6,671 219 6,688 4,900 109,125 208	4,432 25,035 2,169 242 1,443 2,200 109,204 115	3,374 18,410 7,174 130 1,658 300 73,352	4,726 18.094 12,545 298 868	3,342 20,583 12,903 523 900 3,200 151,442
Total Value]	\$ 125,952	\$108,830	\$ 48 ,2 51	\$ 54,087	\$ 78,218	\$110,899

Owing to the stormy weather which prevailed during the fishing season, the yield of fish was not uniform through this division, being larger in some places and smaller in others than the yield of last year, giving, nevertheless, an increase of \$32,681 over the yield of 1873; as may be seen by the above table.

The salmon fishery was better than last year, although fewer fish were caught, the average weight and price being higher than those of last season. The increase in prices is due to the proximity of the Quebec market, and to the great number of American agents buying the fish on the spot, and paying as high as 25 cents per pound. The sturgeon fishery has greatly improved since 1872; the catch in that year being 130 barrels against 523 this season. Notwithstanding the stormy weather above referred to, the eel fishing was far better than in 1873. Signs of decrease are noticed in the quantity of small fish frequenting the waters of that part of the south coast. This failure is attributed:—

1st. To the frequent storms which prevailed during the spring and destroyed part of the fisheries:

2nd. To the presence of porpoises and seals during the breeding season;

3rd. To the enormous quantity of sea weeds growing on the shoals, and to the use of brush fisheries where shad and bar are left to dry at low tide and die;

4th. To sawdust and mill rubbish thrown from saw mills in the rivers.

The law was well complied with generally, except in the case of saw-dust and mill rubbish.

Seventy-three salmon were caught with the fly in Rimouski River this season, of an average weight of 17 lbs. 11 oz. The following is the salmon angling score in that stream for the past ten years:

1865	8	salmon.
1866		,,
1867	36	"
1868	48	"
1869	57	"
1870	18	,,
1871	68	"
1872		,,
1873	43	"
1874	73	

There were caught in Metis River as follows:-

1870	19 salmon.
1871	30 ,,
1872	52
	.,
1874	
. 1	,,

being a steady increase since 1870.

In Matane River, 49 salmon were killed with the fly.

CAPE CHATTE DIVISION.

JOSEPH J. LETOURNEAU, Overseer.

STATEMENT showing the Yield of Fisheries in this Division.

Kinds of Fish.	1870.	1871.	1872.	1873.	1874.
Cod Fish (quintals)	7,635	8,666	6,354	5,625	4,160
Halibut (barrels)	12	7	11		3
Salmon ,,	25	20	8	26	23 <u>1</u>
Trout ,,	8	13	10	9	3 <u>1</u>
Herring "	25	34	37	27	45
Fish used as manure (barrels)	• • • • • • • • • • •	300	1,300	260	150
Cod Oil (gallons)	3,965	5,280	2,353	1,078	1,604
Seal Oil ,,	146.	122	787	440	

Cod fishing was very poor, the yield being 1,466 quintals less than last year. The reason of this is to be found in the fact that the fish did not near the shores, and that as a consequence the fishermen did not resort to fishing as much as usual, but preferred working at the lumber establishments of Ste. Anne des Monts and Magdalen 5—7

Rivers. In spite of stormy weather, an improvement is noticeable in the salmon fishery The number of salmon caught with the fly in Anne des Monts River for the last four years, is as follows:—

1871	8	1873 87	۰
1872	13	1874140)

The above table shows a steady and rapid increase in the Ste Anne des Monts River. This fact is still more apparent, when the average weight in 1873 (17½lbs.) and the heaviest salmon (30lbs.) are compared with the average weight of this year (19½lbs.) and the heaviest fish (40lbs). Trout is also very abundant in the rivers of this Division, but having entered the streams late, net fishing was small. Very little change is to be noticed in Cape Chatte River. Salmon is nevertheless increasing slowly but steadily. Three salmon were last season caught in it by anglers fishing for trout, an unheard-of fact for at least twenty years. The slow increase of this river is due to the poaching of past years; but the prosecutions instituted in 1868 had a good effect, and appear to have made a lasting impression on the minds of the people there. The Overseer regrets being unable to say the same thing of Ste. Anne des Monts River. Two parties were caught spearing fish last season, and had already speared five salmon and two dozen trout when discovered. The fish were confiscated, and their case kept in abeyance for the decision of the fishery officer in command of La Canadienne.

GASPE AND MALBAIE DIVISIONS.

P. VIBERT, JR., Overseer.

COMPARATIVE STATEMENT of the Yield of Fisheries in this Division.

Kinds of Fish,	1874.	1873.	
Cod Oil	15,078	19,751	
Herring	602	929	
Mackerel	125	463	
Salmon, pickled	17	294	
do fresh, in ice	118,304	• • • • • • • • • • • • • • • • • • • •	
Whale Oil	16,300	•••••	
Cod Oil	10,878	16,480	
Seal Oil		11,692	

The salmon fishery was better than that of 1873, and would have been still more successful had it not been for the heavy storm which occurred on the 18th June, and did great damage to the nets at Malbay, Peninsula and Cape Gaspé, just at the time when fishermen were doing best. 118,304 lbs. of salmon were sold fresh, and 17 barrels pickled, making in all 411 barrels.

Comparative table showing the number of barrels of salmon caught during the last

five years :---

Ιn	1870541	barrels.
	1871460	12
	1872343	"
	1873294	"
	1874411	**
	98	"

Cod fishing was poorer than last season. This may be partly accounted for by the storm, during which 100 boats were lost at Percé alone, and several elsewhere. Bait was also very scarce about the end of August. The statistics show that very few mackerel were taken. The northerly winds which prevailed in August may have kept the fish out.

FLY FISHING.

DARTMOUTH RIVER.

Messrs. Glover and Guild fished this river from 23rd June to 8th July, and killed sixty-five fish, weighing 786 lbs.; average, 15 lbs.

YORK RIVER.

The waters of this river kept very high during the first fifteen days in June, nevertheless, 135 fish were killed with the fly; average weight, 16 lbs. Guardians report that a large number of fish ascended to the spawning beds.

ST. JOHN RIVER.

Catch, twenty-nine fish.

MALBAIR RIVER.

A fine little stream, which, with proper care and increased guardianship, may soon

become a good angling river. It was not angled last season.

Last year's report stated that Thomas McCallum, former overseer of Malbaie division, appeared to have a very imperfect knowledge of his duties, and recommended that the same be placed under proper and intelligent guardianship, in order to protect it effectually, and particularly to put a stop to the spearing of eels in the Malbaie River, under pretext of which, it was asserted large numbers of salmon were destroyed, and others driven away from the estuary. This suggestion was acted upon; the Malbaie division was this year abolished as a separate district, and added to that of Gaspé. The desirability of this change is apparent in the improvement of the salmon fisheries already noticed in that division.

255 2,775 10,186 312 **4**90 480 97,120 1,148 \$183,534 Value. COMPARATIVE SCHEDULE showing the Yield and Value of the Fisheries in the Division of Pabos, from 1870 to 1874, 1874. 45 1,250 2 120 6,265 38 8 8 8 18,520 Yield. \$150,429 87,120 46,040 2,625 4,800 8 11,264 1,364 88 988 Value. 1873. 875 1,600 20,480 5,460 11,510 100 67 140 Yield. 2,550 45 13,673 92,061\$ | 120,240 88 337 420 8 Value. 1872. 24,860 1,390 12,940 210 88 123 49 9 Yield. 3,750 12,960 59,360 8 99 735 1,000 280 924 \$177,839 Value. inclusive. 1871. 14,840 1,250 23,560 24,430 100 용 110 99 8 105 250 Yield. 103,500 53,200 13,290 126 413 2,940 3,360 1,358 88 33 Value, 1870. 1,120 13,300 24,170 200 59 25,875 8 ಜ್ಞ Yield. Barrels... Gallons Barrels .. Quintals. ę ę မှ ę မှ ф ခ့ Summer Codfishery Herring Fish for manure..... Mackerel Salmon Halibut..... Description. Cod Oil..... Cod Sounds..... Haddock ę Totals .. Antumn

The above return shows a great falling off in the yield of the fisheries of this division. The decrease is partly due to the stormy weather which prevailed last season, but mostly to the inattention of the late Overseer, Mr. James M. Remon, whose other pressing duties prevented him from properly attending to the requirements of the fisheries placed under his charge. Mr. Remon was, therefore, called upon to resign, and his fishery district has been added to the Gaspé and Malbaie divisions.

PORT DANIEL DIVISION.

W. PHELAN, Overseer.

COMPARATIVE STATEMENT of the Yield of Fisheries in this Division.

	1868.	1869.	1870.	1871.	1872.	1873.	1874.
Cod FishSalmonHerring	57	6,967 79 370	6,175 120 695	8,970 108 1,231	7,590 110 830	6,175 148 280	4,465 110 710

Salmon is rapidly on the increase in this divison. In 1868 the yield was 57 barrels whilst in 1873 it was 148, and, according to all reports, there can be no doubt that last season would have at least been equal to 1873, had it not been for the stormy weather which prevailed in June, and caused such damage to salmon nets in the height of the fishing season. This improved state of things is due to a proper enforcement of the Fishery Laws, and attention to duties on the part of the Overseer.

Cod fishing was poor. Mackerel were plentiful in the months of July and Augus. Herring were abundant, particularly at Nouvelle and Chigouac; but they became scarce

in the fall. There were no contravention of the Fishery Laws.

CASCAPEDIA DIVISION.

R. W. H. DIMOCK, Overseer.

COMPARATIVE STATEMENT of the Yield of the Fisheries in this Division.

	1872.	1873.	1874.
Cod FishQntls.HerringsBrls.Mackerel","Haddock","SalmonLbs.TroutBrls.LobstersLbs	5,530 3,890 84 133 25,264	5,245 2,250 27 83 35,363 5	6,520 1,710 20 42 30,567 15 4,176

Herrings were not so abundant as last year. Mackerel were plentiful in July; but mostly used as bait; only a few were caught. A limited quantity was sold by the farmers to Mr. Hogg, who canned them. Should this gentleman continue his canning operation next season, we may expect more attention being given to this branch of the fisheries.

No American vessels were seen this season above Bonaventure. Cod fishing was not favorable; bait being scarce and weather stormy. Trout were as plentiful as usual on the sea shore, fifteen barrels being taken. Salmon appeared as abundant as ever, and the fishermen did very well until the storm which prevented them from fishing for four days. The following is a statement of the yield of this fishery during the three past years:—

In 1872	.25,264 lbs.	Salmon.
1873	. 35,363	do
1874	, 30,567	do

Grand Cascapedia River is well stocked with breeding fish. Guardians state that they counted over 500 salmon below the Forks. The anglers who fished that stream last season are well pleased with their sport. They behaved in a most liberal manner towards the residents, dividing the greatest portion of their catch with them. A timber jam which prevented the ascent of fish in the Little Cascapedia River materially interfered with the sport of the anglers; only three salmon being killed. This obstruction will be removed next season, and the river in future be kept clear. Three of the salmon stations at the mouth of this stream have also been removed lower down in order to ensure its more speedy re-stocking. Bonaventure River is well stocked with salmon. The following is the score of angling during the past few years in the above-named rivers:—

	Grand Cascapedia River.		Little Cascapedia River.			Bonaventure River.						
Number of Salmon Weight in lbs Average weight in lbs	1871. 44 1,012 23	3,100		$\begin{vmatrix} 1874. \\ 418 \\ 9,902 \\ 23\frac{1}{16} \end{vmatrix}$	1871. Not A	1872.	11	1874. 3 57 17 5 1 6	1871. 60 770 13	1872. 30 487 16	1873. 22 366 16½	1874. 15 225 15

MARIA DIVISION.

ELMINE ALLARD, Overseer.

This Officer was found so inefficient that it became necessary to dispense with his services. His division was abolished and is now merged in that of the neighbouring Overseer for the Cascapedia district. Detailed statistics of the yield and value of the fisheries in this division will be found at Appendix No. 3.

MATAPEDIA AND RESTIGOUCHE DIVISION.

JOHN MOWAT, Overseer.

Salmon net fishing was very successful this season. The fish came in shoals from the 14th June to the 8th July. On the Quebec side of the river, between Maguasha and Bourdon Points, 5,162 salmon were killed in 15 stations; and on the New Brunswick side, between Campbeltown and head of tide 6,157 in 25 stations.

The Indians gave very little trouble this season; the measures adopted by the Department last year having had a beneficial effect. The stations set apart and fished for them have not turned out as anticipated, owing to new channels forming on the bars immediately above the nets and causing cross currents. The nets were, besides, set rather late in the season, on account of disagreements among the Indians; some desiring to fish themselves and others being against it. The net proceeds amounted to \$282, one-half of which was, according to agreement, given to the person attending the station, and the

other half remitted to the Indian Department for distribution among the several members of families. Better counsels will undoubtedly prevail next season, as Indians are now prepared and anxious to fish the station themselves.

The canning of salmon in this division amounted to 174,526 lbs, besides 64,878

lbs. sold fresh in ice. The score of angling is as follows:---

In Matapedia River		Average weight. 21 lbs.
Upsalquitch do		11 do
Lower Restigouche River	119	16 do
		16 do
Upper do do	252	16 do

192,902 lbs. of lobsters were canned in this Division.

QUEBEC AND MONTMORENCY DIVISIONS.

D. Rosa, L. H. Huor. { Guardians.

The following is the comparative statement of the fisheries in the Montmoreney division:—

	1870	1871	1872	1873	1874
Salmon Brls Shad Eels Sturgeon Dez Bar & Whitefish Dez Small Fish Brls	96	91	82	150	114
	1,057	1,100	1,550	1,600	2,250
	19,059	14,728	51,932	9,202	11,856
	1,314	1,882	1,901 Doz.	83 Brls.	321
	1,902	2,126	2,074	447	712
	271	759	412	66	92

The above statement shows that the present seasons' fishery was successful compared with last years'. The yield of salmon is somewhat below last year's figure, but is, nevertheless, higher than that of any previous year. The only decrease of any note lies in the Sturgeon fishery.

Trout fishing in the Lakes of Quebec and Murray Bay was also very successful. The fish are rapidly and steadily increasing in the lakes of this division.

MURRAY BAY DIVISION.

Jos. E. Demeule, Overseer.

This officer was appointed to replace the previous one, dispensed with for inefficiency. He does not appear to possess a practical knowledge of his duties. He sent no report of his doings, nor any statistics of the yield of fisheries of his division.

The yield of fly fishing as reported by anglers is a follows:—

The last named river yielded only four salmon in 1873.

LAKE ST. JOHN DIVISION.

JOB. BILODEAU, Guardian.

This officer was appointed during the course of last season. The principal kinds of fish frequenting Lake St. John and tributary streams are the Winnoniche (land locked salmon) White-fish, Pickerel and Pike. The two former species are specially abundant; the yield being computed at 7,500 Winnoniche, and 1,162 doz. of White-fish. The fishery laws apear to have been satisfactorily observed.

SAGUENAY DIVISION.

FERDINAND SAILLANT, Overseer. Joseph Boily, Guardian.

Yield of the salmon net fishing for the last five years.

In	1870		3,275	salmon.

	1874	*****	2.482	"

River Bersimis.

The Overseer reports that this beautiful stream, which formerly teemed with salmon, is unmercifully being destroyed by the Indians. It is the only river in the Dominion where, out of ill advised compassion for the Indians, spearing is still permitted. Salmon were, formerly counted by thousands, but the steady decrease in their number is very noticeable. In 1872 it is reckoned that 700 salmon were speared, 300 in 1873, and no more than 120 in 1874. Should the present system be continued for two years more, not a single fish will be left in the river.

Baie de Laval.

Salmon fishing was very good; the nets not being carried away by storms.

Patte de Lièvre.

This station suffered considerably from stormy weather; salmon fishing was nevertheless much better than in 1873.

Portneuf River.

A larger number of salmon and trout were noticed in this stream than in any precious season.

Portneuf to Tadousac.

The fishing was not very successful here, owing to the same cause which injured other stations (stormy weather). No nets or brush fisheries could in fact be set without being carried away and destroyed. Fishermen, however, state that fish were abundant, and have device the few days the nets could be set and visited, fishing was most satisfications of the stations located in sheltered places the catch was good. At

Pointe aux Bouleaux, for instance, 50 salmon were caught against 12 in 1873.

Rive à Mars.

Salmon resorted to the spawning beds in larger number than usual. The increase in salmon frequenting this stream is very satisfactory; and notwithstanding some difficulties experienced in the way of building fishways, &c., fish are four times more numerous than three years ago.

River Descente des Femmes.

This river is improving. Were a dam built at its mouth, so as to raise the waters above a long rapid, it would enable the fish to ascend at any time. The cost of this dam might come to \$25 or \$30, and it would be very advantageous, this rapid being the only obstacle to the ascent of fish, which is sometimes stopped at the mouth for over a month.

Eternity River.

Was completely ruined four years ago, but is now steadily improving. The local guardian reports a large number of salmon having entered the river this season.

Rivers St. John and Little Saguenay.

Salmon has increased over one half in these streams for the past two years. Fly fishing was very good.

River Ste. Marguerite.

This river, as usual, ranks first as an angling stream. The residents say they never saw a greater number of fish in the breeding pools. Not a single case of illegal fishing ever occurred on this river; the residents understand that their own welfare depends upon its being well attended to.

The following is the score of angling for the past three years :-

	1872.	1973.	1874,
River Ste. Marguerite, N.W. Do. do N.E. Do. à Mars. Do. Anse St. Jean Do. Petit Saguenay.	$\frac{3}{13}$	125 50 28 39 Not angled,	133 150 75 71 83

GODBOUT DIVISION.

GEORGE L. DUGUAY, Overseer.

STATEMENT of the yield of Fisheries as compared with 1873:-

	18	73.	18	74.
Codfish4	4,083 g	uintals.	3,008	quintals.
Halibut	25	oarrels	15	barrels.
Herring	4	46	145	"
Mackerel			9	"
Trout	13	"	24	66
7	05			

The anglers on Godbout River killed 273 salmon. The following is the number of salmon caught with the fly in that stream for the past five years:—

In	1870	390
	1871	
	1872	
	1873	
	1874	273

MOISIE DIVISION.

G. MATHURIN, Guardian.

COMPABATIVE STATEMENT of the yield of Fisheries in this Division :-

	1869.	1870.	1871.	1872.	1873.	1874.
CodfishQuintals Salmon, pickled'Barrels Do. fresh in ice, Lbs. Cod OilGalls.	1,830 822 1,563	5,131 1,104 2,720	5,151 704 1,985	4,030 855 3,580	2,250 146 204,000 1,940	3,783 12 60,200 1,700

Salmon net fishing was not so good as usual in Moisie River, the catch averaging 160,200 lbs. against 204,000 lbs. in 1873. This result is entirely due to the low state of the waters, and is in nowise to be attributed to a scarcity of fish. The nets were also on several occasions carried away or destroyed by storms. Fly-fishing yielded 256 fish against 281 in 1873.

Cod fishing suffered also from the inclemency of the weather.

No mackerel were seen.

MINGAN DIVISION.

DONALD B. McGIE, Overseer.

COMPARATIVE STATEMENT of the yield of Fisheries in this Division :-

	1870.	1871.	1872,	1873.	1874.
Codfish Herring Salmon, pickled Do fresh in ice Seals Cod Oil Seal Oil	3,057 727 22,996	50,317 3,431 426 5,000 24,252 34,702	40,361 4,600 364 4,242 17,128 28,390	30,009 4,579 217 59,489 3,987 9,247 12,570	16,790 5,710 16 55,876 5,520 13,995 22,710

NATASHQUAN DIVISION.

FRANCOIS THIVIERGE, Overseer.

COMPARATIVE STATEMENT of the yield of the Fisheries in this Division :-

	1871.	1872.	1873.	1874.
Codfish	298	5,794 654 605	3,657 483 150 113,727	3,615 420 404 50,000
No. of Seals		1,674 3,891	1,085 1,781 2,380	1,21 3 2,494 2,947

Nabissipi River.

Salmon were more abundant this season than last year. The nets were set in accordance with the law. Cod was abundant, but bait very scarce.

Agwanus River.

Salmon fishing was very poor, only 12 barrels being caught against 8 in 1873. This decrease is attributed to the careless manner in which the river is fished.

Natashquan River.

Salmon fishing very good; 1184 salmon being caught in one single day. The average weight of the fish was from 10 to 18 lbs., some ranking as high as 30 pounds. The lessee of the net fishing division caught 120,000 lbs.; only 150,000 of which could be canned owing to the scarcity of hands. The balance, 250 barrels was pickled.

Kegashca River.

Cod fishing was better than last year. Bait abundant. Herring fishing might have yielded 400 or 500 barrels had it not been for the scarcity of barrels.

Mistanissi Point.

Salmon fishing not as bundant as last year. Herring plenty.

Pte. lx Croix.

Cod fishing was good. Herring abundant, but barrels were scarce.

Musquaro River.

31 barrels of salmon were caught against 7 in 1873.

Washeecoutai River.

Salmon fishing about the same as last year.

Romaine River.

Salmon fishing about the same as last year.

PENTECOST AND SEVEN ISLANDS DIVISION.

GILBERT BOULET, Guardian.

COMPARATIVE STATEMENT of the yield of fisheries in this Division :-

	1871.	1872.	1873.	1874.
CodfishQntls. HerringBris. Mackerel	960 64 44 430	1,865 150 200 80 1,346	2,150 3 26 880 300	1,939 96 10 31 545

Salmon fishing would have been much better, had it not been for the strong prevailing wind. Fish were very abundant, but the fishermen could set their nets only late in the season, and even then lost several which were carried away and destroyed by the winds and currents.

WATSHEESHOO DIVISION.

P. GENDREAU, Overseer.

COMPARATIVE STATEMENT of the yield of fisheries in this Division :-

	1872.	1873.	1874.		
Cod fish	29 brls.	52 brls. 4 ,,	560 qntls. 33 brls. 2 967 ,,		

The decrease in the yield of the salmon fishery is attributed to the scarcity of fish food.

There are only two kinds of fish in this division,—salmon and trout. The cod entered in this statement was caught at Kegashea by fishermen of Batchawang. Seal fishing is on the increase.

PACACHOO DIVISION.

J. LEGOUVÉ, Guardian.

COMPARATIVE STATEMENT of the yield of fisheries in this Division :-

	1873.	1874.
Cod fish. Hallbut Salmon. Trout Number of seals Cod oil. Seal oil. Whale oil.	2,655 qntls. 200 brls. 180 ,, 8 ,, 1,144 ,, 1,574 gals. 9,526 ,, 400 ,,	3,760 995 2 248 2,954 1,7 \$7

BONNE ESPÉRANCE DIVISION.

W. H. WHITELY, Guardian.

COMPARATIVE STATEMENT of the yield of fisheries in this Division :-

	1873.	1874.
Cod fish	172 brls, 250 ,, 6,170 gals.	7,710 136 5,060 2,630

ANTICOSTI DIVISION.

Full details on the yield of the Fisheries of this Division will be found in Appendix No. 3.

Two local guardians were placed on the north and south sides of the Island during the whole of the salmon fishery, and did good service in preventing poaching and protecting the spawning beds.

MAGDALEN ISLANDS DIVISION.

J. J. Fox, Overseer.

Details of fishing in this division will be found at Appendix No. 3.

ST. FRANCIS DIVISION.

W. C. WILLIS, Overseer,

Fishing in this division was very fair, the yield being somewhat larger than that of last year. Salmon fishing in the St. Francis River was most successful. Salmon began to ascend during the last week in June, and in large numbers. They probably spawn on 109

some of the numerous sand banks in the upper part of the river, as fry were seen in several brooks and other streams, especially in Stacy's and Buoy's Brooks. At Ascottstown mill dam, on Salmon River, the fish were noticed in large numbers, and according to the local guardians reports:—" frequently as many as twenty or thirty "large and small salmon could be counted passing up the fishway in the space of one" minute." According to all reports the fish are rapidly increasing, and resort to the several streams of this division.

The catch is estimated as follows: -

No. of lbs. of Salmon	2,400
No. of brls of Lunge	250

MAGOG DIVISION.

The Department was in hopes than the stringent measures adopted in 1873 against peachers, would be sufficient to deter others from again resorting to such injurious practices. Complaints of a similar nature being, however, again renewed this season, it was found necessary to send special detectives on the spot. Eleven nets, four seines, five boats, and tour spears were seized and confiscated. The following persons were also prosecured and fined for illegal fishing during the close season:—

M. A. Bullard, fined \$8.00 and \$7.05 costs. Wm. Brawley, do 4.00 do 8.00 do H. B. Bigelow, do 9.00 do Wm. Henderson do **8.0**0 do 9.00 20.00 do 26.55 George A. Glines do George N. Goff, do 20.00 do 26.55 Wm. Morrill, do 8.00 do 5.05do

Prosecutions were also brought against John Holtham, Kinsman D. Harvey, John Beade, Oram Glifford, Wm. McGoyan, John Taylor, George Aimsworth, Annie Gustin, but had to be withdrawn, defendants or witnesses having thought safer to leave the country.

RICHELIEU DIVISION.

H. W. Austin, Overseer.

The yield of fishery in this Division is computed as follows:-

District,	Value of Fishing Boats.	Value of Eel Fisher- ies.	No of Shad.	No of bris of Stur- geon.	No of doz. of White- fish.	No of Eels.	No of Tom Cod.	No of Mixed Fish.
District of Richelieu	14,550 6,500 4,000 1,500	2,000	40,000	2	800	54,870 30,000 5,000	20,000	9,044 6,000 2,500 1,250

Fishing was as good as usual, but the great demand for fish of all kinds has increased in such a manner as to induce a greater number of persons to engage in this industry, and bring to market coarse kinds of fish, which previously were not fished for, but now command a good price.

In addition to the above information, Mr. Austin has supplied the following inter-

esting reports on the St. Francis and Nicolet Rivers :-

SPECIAL REPORT ON RIVER ST. FR NCIS.

CHAMBLY, October 19th, 1874.

SIR,—I have the honor to inform you that in obedience with your commands, I duly proceeded to the Eastern Townships to investigate and report upon the salmon fisheries in that portion of the Province. As my first letter of instructions related principally to

illegal fishing at Brompton Falls, I will commence with that locality.

1st. Brompton Falls as you are doubtless aware is the seat of very extensive saw mills, the property of an American Company, doing an enormous business. River St. Francis on which they are situated is at this point narrow and rocky, and a high and well constructed dam has been built by the Company. A sketch of the dam is attached, by which you will perceive the situation of the fishway, the distance to the end of the dam, and the site whence the salmon are taken. It will appear to you that the hole in which the fish are captured is but fifty feet (50) from the fishway, in fact they are on the point of mounting when they are netted, and clearly come under Section 7 Subsection 10. The nets used are scoop or bag nets, having a circumference of about six feet and a length of probably four, the meshes in no instance exceed two inches in extension, and the general average is one and a half. As regards violation of the close time I have no doubt that instances do occur, in fact I know a gentleman on whose veracity I can depend, who saw a fish of about twelve pounds, that had been taken out of season, at the Falls at Brompton. I am however disposed to believe that such acts at this point are rare, and only take place at night, the fishing place being completely commanded by the mills; moreover the local guardian, Mr. Rose, has a reputation for vigilance and honesty. The licenses granted this summer for one month were seven in number, and were all held by mill hands; The number of salmon taken during that period at that little: the cost was \$3. spot amounted to 250, weight from 8 to 12 lbs. each, a few however reached tofourteen pounds, all clean run fish in splendid order. The number marked in the Guardian's book was but 195, but he admitted he had not entered all, and after consulting the Superintendent and others I arrived at the conclusion that 250 was below the mark.

2nd. My next object was to proceed up the river and ascertain all about the salmon on their breeding places in the upper waters. It had been my intention to reach the source of the Great Salmon River, called the Still Waters, and situated on the borders of the townships of Emberton and Ditton, but I found it would be necessary to traverse from twenty to thirty miles of forest, and finding it would be impossible to engage men. and being unprovided with camping requisites, I had for the time to abandon the idea. I was fortunate however in obtaining the information acquired by Indians and others, and was much aided by Mr. Scott, a gentleman who is building a mill on the river, the first, barrier after leaving Brompton. The dam of this mill will not finished until next spring when it will be provided with a fishway, the model of which has been furnished by the Fishery Overseer. Mr. Scott takes much interest in the increase of salmon, and ae his settlement is far up towards the head waters, he will be a valuable auxiliary. He employs a number of lumber men and has given them plainly to understand that any one of them killing a salmon will be dismissed from his service. Both in Ditton and Newport there are several beds or holes in which the salmon spawn in large numbers, but unfortunately in this wild' part of the country they fall an easy prey to the scattered settlers, who sweep the holes with seines. I suggested to Mr. Scott that a few large trees into these pools would interfere considerably with their depredations, and his men were to occupy themselves in carrying out my recommendation on his reaching home. There is a guardian at Canterbury, but I consider great benefit would accrue, if the Fishery Overseer was permitted! to visit this section very frequently during the spawning months. 27th June this year the attention of many persons was attracted by the gambols of an immense shoal of salmon on the shallows in the upper waters of the St.

Francis, many of the fish were so large that their fins appeared above water, and their numbers were computed at about two hundred. I had afterwards an opportunity of accertaining than an unusually large shoal of salmon passed the falls at Drummondville three days before, namely on the 24th and 25th June.

3rd. I now turned down the stream and found little to attract attention in connection with the salmon fisheries until I got to Drummondville. The falls at this place have long been noted as the resort of all the peachers in the neighborhood, and at the time the salmon are running it is a common thing to see the falls lined with men bearing spears, who take with them every fish within their reach'; indeed so systematic is their persecution on the salmon that wooden stages are erected over the favorite resting places, from which point many fish are killed and several wounded. It would appear that all classes take part in these lawless proceedings; the most successful spearman being the mayor of the adjoining municipality. There is a guardian here whose only interest in the Department appears to cease when he has drawn his pay, still with every man's hand against him, his situation cannot A mile below the falls the river is entirely blocked by huge walls of stone forming eel weirs, barring the stream to the salmon ascending, and to the young fish seeking the salt water; indeed the latter are sometimes taken in the weirs. below this comes the sheet of water known as the Basin, and here again we have a perfect labyrinth of stone wails and eel weirs, these are followed by Grant's Rapids and more eel weirs, and further down by more rapids and still more weirs. The first obstructions with which the salmon has to contend and the last I have to mention are the nets set at the mouth of the river, to take any fish that may be mounting directly the ice leaves, I am informed that the nets are planted, and continued without interruption as long as a prospect remains, I could not ascertain that many salmon were taken in this manner, but no doubt some are killed and many others frightened and turned back.

4th. I here close that part of my report relating to the salmon of the St. Francis. That this stream is a highly favored resort of these fish cannot be doubted, and we have every reason to believe that under proper protection it would in a few years rival many rivers with a higher reputation. When we reflect that after running the gauntlet of so many buses, 250 fine fish were taken in one spot, that the largest salmon speared at Drummondville (by a magistrate) turned the scale at 43 lbs., and up to a certain point enemies molest them at every turn, we cannot resist the conviction that with proper care and attention no river in the Province is of greater promise than the St. Francis.

Falls to the mouth of the St. Francis, the Fisheries Act is unknown and unheeded, the chose season for dore, bass, &c., is quite unobserved, and during the entire month of May cartloads of these fish are taken with seines and carried for sale to the back town ships. Sturgeon still frequent the St. Francis in considerable numbers. A few days before I reached Drummondville one weighing 90 lbs. was speared mounting the falls. In the spring of the year they may be seen in the dead water below the falls, rolling about like a shoul of porpoises. The Indian name of this stream is the "River of Sturgeon," the favorite food of this fish is the clam, and here they abound. The young of these fish weighing probably $1\frac{1}{2}$ a lb. are speared in great numbers, some boats bringing in one hundred and more of an evening. I beg strongly to recommend a close season for sturgeon.

6th. Following your instructions I closely inspected the mills at Brompton, with a view of reporting on the practicability of their consuming their rubbish and saw dust. I have caused this plan to be observed in some parts of my own division, and the debris that was once thrown away is now sold at a profit. But this hardly applies to the works under consideration, and for burning up the waste in a kiln they are most unfortunately situated, the mills being built on a bed of rocks, out in the river on the main land, first come their many workshops, then lumber yards of great size, and then the tank of the Grand Trunk Railway rendering a tramway impossible. The managers told me they would be willing to go to the expense of four or five thousand dollars in building a furnace

or kiln to burn all rubbish, but the constant and sustained tax of carting the waste past all the obstacles I have described to a point when the furnace could be built, would weigh so heavily upon them that when Government pressed it they would be obliged to shut down the mills. It is no doubt a most important industry, employing during the winter 550 hands and in the summer season 150, and spending annually in Canada one hundred and fifty thousand dollars of American money. The banks of the picturesque St. Francis are disfigured beyond expression by the unsightly acres of broken slabs and wood, and a hundred miles below, the Indians gather their winter fire wood from the harvest that is sent them. Immense beds of saw dust are also formed at some points, and must be to some extent injurious and detrimental to the fish entering the river

7th. Before closing my report I beg for a moment to call your attention to the River Nicolet, situated at no very great distance from the St. Francis and at one time far surpassing the latter river by the great size and number of the salmon, notwithstanding a persecution equally as persistent as that practised in the St. Francis, added to small in many places, and dams without fishways, these fish annually resort to these favorite waters and mount the river to the first mill dam. From all I have heard and seen, I have no hesitation in saying that protection extended to that stream would be a desirable measure, and that after a very few years of care and attention its former high character as a salmon river would be firmly established. I would respectfully recommend that for the next three years the licenses given at Brompton Falls be reduced to two, that those two be limited to taking only a dozen fish each. I also recommend that two licenses on the same terms be granted at Drummondville. To grant no licenses it is believed would encourage poaching, moreover the licensed men would have an interest in looking after the fishery.

I also think a few eel weir licenses might be granted, the limits of each fishery being

clearly defined by the Fishery Officer.

I have the honor to be, Sir,
Your obedient servant,
Hugh W. Austin,
Fishery Overseer.

SPECIAL REPORT ON RIVER NICOLET.

CHAMBLY, February 24th, 1875.

Sir,—In compliance with your wishes I have the honor to forward some items of information collected in the Eastern Townships during the past summer regarding the River Nicolet. I beg in the first instance to state that I did not myself visit the immediate locality, not having been instructed to do so, but the old settlers and others who furnished the particulars are men of undoubted integrity, have passed their lives in the neighborhood, and their statements may be received without hesitation.

The River Nicolet, flowing into the St. Lawrence at the lower end of Lake St. Peter was some years ago, one of the most noted streams for salmon; on the south shore the fish being known particularly by their large size, showing an average of from 18 to 24 pounds. It is a somewhat singular fact that the largest fish always mounted the Nicolet, whilst the larger number, but smaller fish, pushed on some forty or fifty miles up Lake St. Peter, until they reached the sister river the St. Francis. In the last named stream a salmon rarely turned the scale at 15 lb., the average weight being about ten.

You are aware that Nicolet River has two branches, called the north east branch and south west branch, these join and make one stream at a point called the Fork about two miles above the village of Nicolet. The north east branch is the great salmon branch; to this I will now refer. The fish ascending meet their first obstacle at Sincennes' Mills, Ste. Monique, about four miles from the Fork, a closed dam barring further progress, except at high water, when a few always manage

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Upon the repair of the works some time ago, a small canal salmon trying to force a passage; attacking them with their spades in the shallow ditch nearly the whole were captured. Below the dam is now a favorite spot for spearers and was cut around the dam, the men returning to their work found some thirty many a fine fish is thus taken. Mounting the stream there is nothing to arrest the fish until you rrive at St. Leonard, where there are also mills, owned by Mr. Marquis, and This point is about 15 miles from the mouth. again a closed dam. up, there are fine reaches of river for breeding, until you reach Arthabaska, when mills again occur, and continue at intervals, all of course with slides. It is however the opinion of shrewd settlers that if the river was opened as far as Arthabaska, fish-ways being placed in the two first named mills; salmon would spawn in the long shallow reaches about St. Leonard and the upper mills might be left without molestation. In this opinion I am disposed to concur; at all events the fish might be attracted to the stream, by opening the two lower dams; after a season or two it would be easy to ascertain if any further extension was necessary. I would also strongly recommend that a certain number of young salmon be turned into this river, as soon as possible, after the fish-ways are established.

I am informed that the subject of protecting the river was at one time urged upon the united Municipal Councils of the District, the proposal being well received, and the feeling in its favor very strong in the county; the project was ultimately abandoned for want of funds. With regard to the other branch (south-west,) there are so many mills and dams upon it that very few salmon can, or do, attempt its ascent. Moreover, it is worthy of notice, that even in the most palmy days, it was but little used by these fish. On reaching the Forks, the salmon turned up the north-east branch, while the south-western stream was the favorite breeding ground of the sturgeon.

It would occupy too much of your time to relate the accounts of wonderful takes of salmon in this river, before those mills were erected; and allowing a wide margin for exaggeration, I have no doubt that the number of fish attracted to its sources was something extraordinary. In fact old Indians in speaking of the Nicolet and St. Francis twin rivers, term the first "Salmon River" and the latter "Sturgeon River," in the nomenclature of their tribe. Each bears its appropriate name.

It would be impossible to exaggerate the amount of illegal fishing that is carried on throughout the Nicolet River and the entire lower portion of the St. Francis. The Fisheries Act is unknown and unheeded, and many of the most respected residents loudly lament that two of the finest and most productive rivers in the Province are rapidly approaching depletion, from want of Government care and protection. That at a former period both Nicolet and St. Francis took high rank as salmon rivers, I see no reasons to question, and it will readily be conceded that under the fostering care of your Department, much of their former reputation might be restored.

I have the honor to be, Sir,

The Honorable Minister,

Your obedient servant, HUGH W. AUSTIN.

of Marine and Fisheries.

IBERVILLE DIVISION.

J. B. CHEVALIER, Overseer.

The following figures are furnished by the Local Fishery Overseer:

No. Value.

No. 450 0

No of Boats	16	\$ 450 90
No of Seines	10	160 00
No of Eel Fisheries		1,789 00
No of Eels caught		1,629 30
No of Mixed Fish		584 00

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This Division comprises part of the Richelieu River extending from St. John to Lake

Champlain.

From the boundary line to St John, Richelieu River is mostly formed of swamps and lowlands, which are covered with water in the spring. Owing to its large extent, Lake Champlain can be considered as an immense nursery for fish, and Richelieu River being the outlet of this Lake, offers exceptional advantages for spawning purposes. The fish resort there in immense numbers, and this river may be considered as one of the best spots for the reproduction of fish in the Province of Quebec.

MISSISQUOI DIVISION.

P. E. LUKE, Overseer.

The yield and value of the fisheries in this Division is estimated as follows:-

Value of boats and nets		\$ 913
No of Shad	3,870 @ 10 cts	387
No of barrels of Pickerel	186 @ 10 cts	1,860
do Sturgeon	1 @ 8 cts	8
No of Maskinonge	300 @ 2 cts	600
No of brls of mixed fish	562 @ 5 cts	2.310

The statistics show an increase in the yield of fisheries of this division.

A fact worthy of note is that four young salmon were caught during the season in Missisquoi Bay, and put back into the water. These fish are presumed to be the offspring of the ova placed in Lake Champlain a couple of years ago by the Fishery Commissioners of the State of Vermont.

CHATEAUGUAY DIVISION.

WILLIAM CLYDE, ANDREW WATT,

No fishing of any account is carried on in this division, most of it being done by anglers from Montreal. No contravention of the fishery laws were reported during the season.

TERREBONNE DIVISION.

L. J. LORANGER, Overseer.

The Overseer in charge of this division is inefficient, and the Department intends sending next season an officer to devise the best means of putting the waters of this county under proper guardianship.

OTTAWA COUNTY DIVISION.

Special Guardians were employed to protect the fisheries of this division during last yenr. Large quantities of trout, caught during the close season, were seized and confiscated. The fish were in every instance distributed among the Protestant and Catholic charitable institutions of the City of Ottawa. Thirty nets were also confiscated. It is to be expected that these stringent measures will ensure better observance of the law in future.

APPENDIX No. 10.

REPORT OF THE INSPECTOR OF FISHERIES FOR NOVA SCOTIA AND NEW BRUNSWICK.

Hon. A. J. Smith, Minister Marine and Fisheries. St. John, N.B., December 31st, 1874.

SIR,—The reports and returns from the local officers continue to show a satisfactory state of the fisheries in the Provinces of Nova Scotia and New Brunswick. In some counties of both these Provinces, owing to local causes, the catch has fallen short of last year, but in others it shows a very considerable increase, especially in salmon, so that on the whole, the total catch exceeds that of last year, which was very much in excess of the three previous ones. This steady increase is the best proof that can be offered of the beneficial results of the protection afforded by the *Fisheries Act*.

Restigouche County.

The returns from this county continue to show a steady improvement in the salmon fishery. Though the freshets in the spring considerably delayed the fishermen in getting out their nets, the take has exceeded that of last year. The lobster fishery has also been very productive, and this branch of business is becoming of great importance. The refuse forms a valuable fertilizer and is largely used by farmers in the neighborhood of the factories. Cod, mackerel and herring have given about an average catch, but these fisheries have not been as largely pursued as formerly, more attention being given to the lobster fishery.

Gloucester County.

The salmon fishery along the coast of this county was somewhat interfered with by a severe storm in the latter part of June, which destroyed a large number of nets, but the fish were so plentiful that previous to the storm the canning establishments could with difficulty dispose of their daily supply. Nepissiguit, Tetagouche and Middle Rivers were well stocked with fish, and during the first part of the season, while the water was high, angling was better than usual, but during August and September the lowness of the water interfered somewhat with this sport.

Overseer Hickson reports that the yield of the lobster fishery far exceeded that of last year. The catch of cod was about an average one in the aggregate, though about Shippegan there was a falling off, owing to the pertial suspension of business by a large Jersey firm which did the chief business there. The fall herring fishery on the Caraquet and Shippegan banks has been declining for some years, and was this season worse than usual. The fishermen there complain of the practice of throwing over "gurry" by Nova Scotia and P. E. Island fishing vessels. It is difficult to suggest any remedy to meet this evil, as the offence is committed at night so that it is almost impossible to detect the offenders, but there is no doubt that the practice is having a bad effect upon this fishery. The oyster beds of Caraquet are fast running out, the oysters taken being now so small that they are scarce fit for market, and some measure of protection is necessary to prevent their speedy exhaustion.

In the Pokemouche district the gaspereau fishery was more productive this season than last. Mackerel and herring were very plentiful on the coast, but these branches of fishing are not pursued with much vigor by residents. Bass are increasing in the Pokemouche River, and will ere long form a valuable branch of the fisheries of that

district.

Northumberland County.

The reports from the Overseers of this county are very cheering, and show a great increase in the catch of all kinds of fish, but the principal improvement has been in the salmon fishery, which was very productive. At the mouth of the river the catch of

spring herring was very good, while that of salmon was unprecedented. Mackerel were plentiful, but this fishery is not largely pursued in this county. Overseer Perley in his report says :- "As regards salmon I may venture to say that there has never been so great a catch in any one season on the Miramichi. The catch of alewives has been better than for many years; shad have also increased, and I think they will yet return as in former days." Overseer Hogan reports that in his district the take of salmon has been unprecedented, and he feels certain that the returns are short of the total catch, as the fishermen are averse to giving correct returns, under the impression that it will lead to a tax on their industry. The bass fishery continues to improve, and there is no doubt that the close time provided last year will have the best effect upon this valuable fishery. The order in Council increasing the size of mesh from four and a half to six inches met with much opposition from fishermen, but the immense destruction of small fish by the old nets rendered this change necessary, and hopes are entertained that they will soon see that it will conduce to their own advantage. Overseer Cameron reports that in the early part of the season the run of gaspereau was better than for a number of years. From the last of May until about the 20th of July, when the water got low in the river, he never knew a better run of salmon in the south-west branch. After this date there was considerable poaching done by sweeping the bars in the Arbo Settlement, below Doaktown, about the Hovey Islands below Boistown, and in other parts of the river which offer great facilities for this work. After the nets were raised in August a fine run of fish got up to their spawning grounds on the main river and the Taxes branch, which Overseer Cameron found very difficult to protect from poachers. In a special report on the state of this river, made to you in October last, I pointed out the great need of additional officers in several localities on both branches of Miramichi, and I would again urge that Wardens be appointed for the Arbo and Cochrane settlements, Doaktown and the Hovey Islands. The facilities for poaching in these places are so great, and the officers are so far apart that it is impossible to arrest the offenders, who resort to every species of ingenuity to escape detection. Complaints still continue to be made of the excessive netting pursued at Portage Island, in the mouth of the river, and I would again submit that some suitable regulations be made to reduce the number and length of the nets set in that locality. I am informed that this island has been placed under the control of your Department, and I would respectfully suggest that no fishing stations there should be occupied except under license.

Kent County.

The returns from this county show a very large increase in almost all kinds of fish, except alewives, the take of which has been smaller than usual. Overseer Sutherland attributes this to the scarcity of salt, which he says it was impossible to obtain during the season for the catch of this fish. The lobster fishing has been carried on with more vigor than formerly, and the quantity canned was largely in excess of any previous year. More attention is now paid to this fishery than to any other, as it is found to be more remunerative. The facilities for successfully carrying on the cod, mackerel and herring fishery along the coasts of this county are very great, and by a proper prosecution of the business immense quantities might be taken. The fishing grounds are but a short distance from harbors which afford good shelter and may easily be entered. No better investment for capital is offered than these fisheries present, but at present they are pursued to a very limited extent. Overseer Cormier, of Cocagne district, reports that the catch of salmon has been double that of last year, while the lobster fishery has largely increased. Bass and smelts have been caught in large quantities and sent to American markets. Cod, mackerel, and herrings have yielded more than an average catch. oyster beds of Buctouche and Cocagne, in common with those in other localities, are showing the effects of constant raking and the quantity taken is yearly decreasing. Overseer Cormier writes :- "It is very desirable that Government would make such regulations as will protect them in future, and I would suggest that some of the Buctouche and Cocagne beds be set apart for natural or artificial propagation."

Westmoreland County.

The fisheries of this county have hitherto been pursued mostly for home consumption, and no great quantity has ever been exported, consequently it is difficult to get accurate returns of the catch. The take of shad in Dorchester Bay has exceeded that of last year both in quantity and quality. Overseer Deacon reports that salmon and gaspereau are returning to Shediac River, since the opening of the dam has afforded them a passage. He says:—" As for the oysters in our noted harbor I can say but little; in comparison with former years but few are now taken, and I would again recommend either that the harbor be leased for oyster culture, or that all raking be prohibited for a term of years. In the Parish of Botsford a lobster canning establishment has been in operation during a part of last season, and another has been erected this fall, which will be ready for work in the spring." As the business is just commencing in this county, it is important that the regulations should be strictly enforced, and I would respectfully recommend that Overseer Deacon's district be extended to include the Parish of Botstord, and that a local Warden be appointed to act under his instructions. Overseer Davidson, of Bay Verte, reports that he had much difficulty in enforcing the provisions of the saw-dust law, but has succeeded in getting the mill-owners to make arrangements that will in future prevent the refuse destroying not only the fish but the navigation of the rivers, and he hopes that in a few years salmon, bass and alewives will frequent them as formerly. only fish taken in any quantity in this district is the spring herring, which strikes in about the 1st of May and continues till the middle of June. Large quantities of these fish might be taken, but the people catch no more than will supply the local consumption.

Albert County.

Fishing in this county is pursued chiefly by farmers who devote only a small portion of their time to the business. The shad fishery was better than for many years past, owing to the early spring. Line fishing was very good, but has not been followed so extensively as usual. Alwives are increasing in Germantown Lake, and large numbers were taken, principally for home use. The catch of salmon has rather exceeded that of last year. In the Pollet and Coverdale Rivers there is not much improvement. The milling operations seriously interfere with the hoped for increase of salmon in these streams. Heavy freshets tear out the fish-ways and jams of logs prevent the passage of fish. The lumbering interest is of much more importance to this part of the county, and it is a question deserving consideration whether these streams ought not to be exempted from the operation of the Act.

Victoria County.

Overseer McCluskey reports that salmon were not so plentiful in the Tobique as they were the previous season, which he attributes to the greater number caught in the main river. The additional Wardens appointed last summer will give this river the protection it so much needed, and will, in a great measure, put a stop to the poaching which has hitherto done so much injury to the spawning grounds. But one instance of unlawful fishing was reported to the Overseer during the season.

Carleton County.

Overseer Harrison reports that salmon were more plentiful during the summer, but the height of water and the quantity of logs running down the river during the fishing season prevented the usual number of nets from being set. He states that the law has been generally observed, and he had no occasion to impose fines or make any forfeitures for illegal fishing.

York County.

The recent death of Overseer Charles McPherson leaves me without any report from this county. The returns of catch made by the wardens show an increase over last year. A letter from Warden Brown, of Southampton, informs me that he had no trouble with the fishermen, and that the law was cheerfully complied with.

Sunbury and Queen's Counties.

Overseer Hoben reports an increase in the catch of salmon, shad and alwives in these counties—that of alwives was especially good—and in addition to supplying the local consumption, a large quantitity was sent to the St. John market. He states that no cases of illegal fishing had come under his notice.

King's County.

The returns from this county show about an average catch, the whole of which is used for home consumption. The Kennebecasis was extremely low during the whole summer, and the number of salmon seen in the head waters was very small, but in the lower reaches of the river they were more plentiful. The lumbering operations on that river seriously interfere with the increase of salmon, by disturbing the spawning beds and destroying the ova, while jams of logs on the river prevent the fish from ascending. The hopes I entertained of restoring this river as a nursery for salmon have not been fulfilled. The cause lies more in the altered conditions of the stream and its surroundings than in any want of protection. The once secluded spawning beds are now bordered by cultivated fields and meadows, crossed and recrossed by herds of grazing cattle, which have driven the fish from their old haunts, and it is very doubtful to my mind whether it can ever be restored as a salmon stream of any importance.

Saint John County.

The returns show rather more than an average catch, although the fishing in St. Martin's district was not as actively pursued as in past years, owing to the higher wages obtained in the shipyards. An excellent fish-way has been placed in the dam on Salmon River in this district, and the proprietors of the mills show every disposition to comply with the requirements of the law. Overseer O'Brien, the newly-appointed officer for the western district, has been very zealous in enforcing both the *Fisheries' Act* and the Corporation law for the protection of the harbor fisheries. The weekly close time is now strictly enforced, and the sawdust law is seldom violated.

Charlotte County.

The returns and reports from this county continue to be of the most cheering character. Overseer Curran, of St. Croix district, says: -- "The increase of fish in the River St. Croix is now a marked success. The water was high until October, and salmon were seen going up in great numbers. The increase of young salmon is proved by the fact that boys fishing for trout now catch them in considerable numbers. Alewives continue to increase, and pass through the fish-way at Middle Landing, but I do not think that many get over Salmon Falls, as the freshet is unusually high in June, and the water too strong for them; a fish way here would be of great service. In the Denis stream the water was alive with them, and I allowed the people to fish two days in the week, which gave the surrounding country as many as were needed for domestic use. I have had a fish-way erected on the west branch of Denis stream, at Sherman's Mill, which now gives them access to another large lake. I also had a gate opened at Ewart's mill, so that there is no hindrance to their getting to the head of the stream. The people now see and realize the benefits of observing the regulations. I have no violations of the law to report this year. As a general thing the people show no disposition to act contrary to its provisions, and even the mill-owners have kept their rubbish out of the river this year. By the exertions of the Maine Commissioners, the mill-owners on the American side have also been more careful of their rubbish, and comparatively little now gets into the river. A fish-way has been erected at Princetown on the western branch of the river, so that salmon can now get into the western lakes, and there is no reason to doubt that fish will once more be plentiful in the St. Croix. There are hopes that the oysters planted in Oak Bay last year by Mr. Young, will yet succeed, as many of them are alive and appear healthy. 119

Overseer Cunningham, of the Inner Bay District, gives a most favorable report of the herring fishery. Writing in November last, he says:—"The winter herring fishing has just commenced, and bids fair to exceed that of last year, which was very productive. They are now selling for 50c. per hundred for bait to United States fishermen, and for the Boston market." He thinks the present large operations in the lobster business are diminishing the supply of this fish, and that the average weight is also diminishing. Although the establishment at St. Andrew's put up about the same quantity as last year, it took more traps and more men to catch them.

Overseer Best, of Beaver Harbor and Lepreaux District, reports very favorably of the herring and hake fishery, and his returns show a large increase over those of last

year.

Overseer Brown, of Campo Bello, reports that the herring fishery shows no decrease, but says that the catch of cod and pollock has slightly fallen off from last year, while that

of hake shows a large increase.

Overseer McLaughlin, of Grand Manan District, reports that the year's operations wound up well, and that fishermen generally have reason to be satisfied with the returns. He says: -" While there has been a large falling off in the catch of lobsters, and a slight decrease in smoked herrings, the catch of pickled herrings, cod, pollock and hake has been very much larger than that of last year. The waters of Grand Manan literally swarm with young herrings, large quantities of which have been driven on shore by the pollock in all parts of the district, and their incredible numbers in these waters are evidence sufficient of the good results of a strict protection of the spawning ground at Southern Head. The falling off in the lobster fishery of this district is to be attributed to the fact that the grounds are over-fished, and bid fair to become exhausted. The only recuperative measure that will be effective is an annual close time from 15th of July to the 15th of the following March. There has been constant line and net fishing in my district during the whole of the past year, and at the present time (31st December) there are abundance of fish; a few days since two men loaded a boat twice in one day with fine cod and pollock. The last year has been a very busy one with me. The enforcement of the lobster regulations kept me on the alert during the first part of the season, while the close time at the Southern Head, the weekly close time and obtaining of statistics has filled the balance of the year."

The following report, compiled from returns received from the county overseers of Nova Scotia, has been furnished by W. H. Rogers, Esq., the fishery officer for that

Province:-

The returns of the fisheries of Nova Scotia for the past year show a slight-talling off in mackerel, herrings and cod fish, but a very large increase in the production of lobsters. It is important some means be adopted to strictly enforce the regulations regarding this fishery. As there are prospects of a large extension of this business in the coming season, there will consequently be a heavy drain upon these fish, and unless the law be strictly observed the supply must, in a few years, be exhausted, as has been the case in other countries.

Inland Fisheries.

The returns show a small increase over last year. Alewives show a considerable increase, and the yield of salmon would have been much larger had it not been for adverse and stormy winds in the spring, and a scarcity of water in the rivers in the fall, as stated by the various overseers in the reports appended. This fact would seem to indicate that the improvements and appliances for getting the fish over mill dams and other obstructions up to their natural spawning grounds are having the desired effect in showing an increased yield year by year.

Having personally visited every county in Nova Scotia and Cape Breton during the past summer, and examined most of the mill dams across streams visited by migratory fish, I am prepared unhesitatingly to say that where fish-ways have been properly constructed and located in the dams in accordance with my instructions, the fish have

ascended in quantities without any difficulty.

The fact is now established in this Province beyond all controversy that fish-passes properly constructed, after the model adopted by the Department, are all that is necessary for the fish to ascend to their spawning grounds.

Poaching.

The streams in Nova Scotia are comparatively small, and consequently offer peculiar facilities to peachers, and make it exceedingly difficult for officers to enforce the law. All these depredators require is a small sweep net and spear, and under cover of the night, or in the seclusion of the bushes fringing the streams, and in some instances with blackened faces, they commit sad havoc among the fish without being detected. Every year confims my former convictions that if the law is to be effectually carried out, the pay of the officers in charge of this important branch of our fishery must be largely increased. It is becoming a question for consideration whether it would not be expedient to raise a revenue direct from the fisheries themselves, to defray the expenses of their protection. In what way this can best be done without injury to the interests of this important industry, I leave for others to determine.

Halifax County.

There has been a falling off in some branches of the fisheries in the eastern part of this county, which is partly accounted for by the increased number of lobster factories put in operation this year, inducing fishermen to partially abandon their line and net fishing to supply these factories.

In the Eastern division attention has been paid to the erection of proper fish-ways over the dams on the principal streams. The one at Moser's River was found inefficient, and is being reconstructed. The one on Charles River will be watched in the spring to

ascertain if the fish pass up readily; if not passable it will be remedied.

The Musquodoboit has now the best pass on any of the streams in this section for salmon and trout, and if found that shad and alewives cannot ascend, an alteration will be made to suit these fish also. Chezzetcook and West or Middle Rivers have no dam obstructions, but the expenditure of \$200 on the latter and \$50 on the former would greatly improve these streams by allowing the fish to ascend at all times of tide. The importance of the free ingress of the fish visiting the rivers of this section cannot be over estimated. Overseer Fitzgerald states that the river fisheries of the Western district are improving and that the fish-ladders placed on the streams are sufficient.

Lunenburg County.

Overseer Redden says East, Gold and Middle Rivers are free for the passage of fish, excepting Middle River Branch, which has some naturel obstructions. Martin's and Mushamush Rivers remain in a bad state owing to saw-dust, drift stuff and natural causes. The shore fishery in this county has given an average crop, excepting lobsters. The falling off in this article is attributed to the large amount of female fish caught the two previous years.

In the Western district, Mr. Jost reports that the catch of salmon in Lahave River and estuary, as well as in the other rivers and waters, has been considerably less than last year; but the fact that large numbers of salmon have been seen at Indian Falls, some eighteen miles above Bridgewater, indicates that the fish passes are improved and that the saw logs on that river do not form a complete blockade. Mr. Davison has built a new fish ladder this season on a much more eligible site than the former one. A promise made to built a new fish-way at the gang mills near Keady's Bridge on the Mushamush has not been fulfilled; this matter will be attended to in the spring and instructions given to the newly appointed Warden, Mr. Andrews, to give this dam his special attention. Mr. Jost further remarks that the general fisheries of the County

have been good for the year, although there was a considerable decrease in the quantity of herrings taking on the shore, but this has been made up by cargoes from Newfoundland and Labrador. The bankers, which were more numerous than usual, did remarkably well. The Labrador and North Bay cod fishermen, with but one or two exceptions returned with full fares.

Queen's County.

Overseer Sellon reports from Liverpool a scarcity of salmon in the spring, although some were taken among the drift ice on the 28th January, an earlier time for the visit of these fish than ever before known. This run had no difficulty in ascending the river and were about 9lbs, in weight. The May school of salmon was not abundant and was late in coming owing to the prevalence of easterly winds with snow. The fish in this run weighed from 12 to 15lbs, and in July a number was taken of a large size. In September quite a number of salmon were seen at the mouth of the river; these fish were short, bulky, and very fine.

Alewives came in June and as the main dam was broken down, the fish passed up without any obstruction. But few were taken in their passage up. Salmon were late coming to the Medway for the foregoing reasons: In June, large numbers of salmon and alewives were taken at the big dam on the afternoon of Monday; by request I went there on Wednesday and cut off 30 feet from the east end of the dam. I saw salmon and alewives go up this pass soon after it was made. Being requested by the mill owners to visit Barnaby's dam, where too many salmon and alewives had been taken on the Monday afternoon previous, with the assistance of several mill owners, he cut 20 feet from the west end of the dam, removed rocks and deepened the passage, leaving the pass all that was required for the fish to reach head waters. These improvements are valuable to future success. Large numbers of young salmon come down the Liverpool and Medway rivers during the month of May and go to sea without trouble. With proper care these rivers will be well supplied with salmon and alewives.

Alewives are increasing in Broad River, Stewart's Lake and Robinson's Brook, more having been taken at these places this season than for a number of years previous. The summer cod fishery has not yielded a fair average, for want of bait, but the fall catch has been extra good. Mackerel was not an ordinary catch. Herrings did not come in till late, and then not in any quantity.

Important and beneficial improvements have been made this summer in dams and fish ways; each of the 45 mill dams has a pass suitable to the place. The experience Mr. Sellon has gained while in office having been put into practical operation by him, is one reason for this favorable state of things. While the mill owners have given this valuable officer no factious opposition, in some instances their advice and assistance have strengthened his hands. The small amount of fines imposed is a proof that the law is respected. Satisfactory information is being received that many breeding fish are seen far up the rivers on the spawning beds. Mr. Sellon regrets to add that some poaching is done at night. This, he says, can be remedied by the appointment of Wardens at Westfield and Pleasant River for small pay.

Shelburne County.

Overseer Ryer of this county reports that the catch of pollock and herrings has been below the average this year and the returns from the cod fishery also shew a short crop. The river fisheries, although producing no considerable yield, yet show an increase over the past few years. The facilities for the passage on Roseway River are now good. The fish ladder put in Coffin's dam on the Clyde River, and another on Smith, Harlow & Co's dam on the some river have proved impassable; these will have to remedied in the spring. Birchton Brook is properly looked after and the fish have ready access, as also to Round Bay Brook, Indian Brook, Green Harbor and Well's Brook. There are yet some streams more or less obstructed which require looking after in the spring.

Yarmouth County.

Overseer Enos Gardner reports from this county as follows:- There has been considerably less fish taken this year than last. The berring and mackerel fisheries have been almost a failure on our coast, and the salmon fishery on the Tusket River and branches was very small. The alewives fishery was very good, Our river at Tusket was full of fish during the fishing season and there was an excellent catch, and there appears to be a disposition on the part of most settlers on the river to assist the officers in carrying out the law. I was at Carleton mill dam on the 2nd June, and took with me Warden John A. Hatfield; on that day the river below the mill dam was full of fish and we had a good opportunity of seeing the working of the fish ladders which had been placed there according to instructions left by W. H. Rogers, Esq. That day the fish found no difficulty in getting up. If the owners of the mill will keep the ladder in as good condition during the fishing season of next year, it would be all that is required. There was only one fine collected this year, being for a breach of the lobster regulations. Reynard was fined under Chap. 95 of Revised Statues of Nova Scotia, the fine and costs, are not paid, an execution is in the hands of a constable; the fine was for having the river closed from side to side and no passage at the mill dam for young fish.

Hants County.

Overseer O'Brien informs me that the law and regulations have been strictly adhered to along the Bay shore and the fishermen are beginning to recognize the utility and reap the benefit derived therefrom. He also calls attention to the want of Wardens on the Shubenacadie River. With the exception of its mouth this fine river is under no supervision. The catch of all kinds of fish in this district has increased materially over that of last year.

King's County.

In this county there has been an increase in the quantity of fish taken this year over last and the quality (particularly of shad) was better than for twenty years past. The principal fishing ground for shad is at Scot's Bay; the quantity of fish taken there

being nearly equal to the aggregate of all the others.

Overseer J. E. Starr reports a servious and fatal melee which occurred between parties who were fishing in Scot's Bay contrary to law, and constables with a magistrate's warrant to enforce the law. The parties trespassing resisted with bludgeon and axe and in the strife one of them was shot below the knee by one of the constables, an artery having been severed and the man neglected, he bled to death. It is not for me to say how far the constable may have gone beyond his duty; but it does seem hard that innocent men who had been called upon to assist an officer in the name of the Queen and who it appears used no violence, nor offered any until attacked, should be sent to the penitentiary for three years, leaving destitute families whose sole support depended upon these men's labor. It is very unfortunate that such an affair should have happened, involving as it did the life of an individual; and it is also unfortunate with reference to the future administration of the fishery laws, as it will now be very difficult to obtain assistance to arrest a set of men determined to violate the law at all hazards. Mr. Starr however, is happy to report that there is an evident disposition generally on the part of the people of this county to respect the law.

Overseer Bishop reports that the catch of alewives has been in advance of last year, both in quantity and quality, while the salmon taken has been less. From some unknown cause the latter fish did not visit this section as plentifully as last season. In most instances Mr. Bishop has been able to keep the rivers clear of obstructions, so that fish may get a favorable pass to their spawning grounds. In some cases he had to resort to the law for assistance. There are four dams across the Gaspereaux River, erected for driving purposes, which effectually debar the ascent of the fish. There has been consider-

able opposition on the part of the proprietors to having these obstructions removed or remedied, but matters are approaching a crisis, and it is to be hoped in the spring sufficient passes will be provided for the free ingress of fish.

Annapolis County.

The report of Overseer Carty gives a falling off in the quantity of hake and halibut taken in the Bay of Fundy, particularly in halibut. The fishermen attribute this to trawling. The Annapolis or Digby Basin he states, has been more productive than it has for some time past, with the exception of salmon. These fish were very plentiful last year in the Annapolis River and tributaries, while but few visited that locality this season. At Margaretville and Port George stations large numbers of salmon were taken last year, and although greater preparations were made in anticipation of the return of the fish, but comparatively few were caught.

Pictou County.

Overseer McDonald reports a falling off in the catch of all kinds of fish particularly of salmon, and accounts for it by the unusually cold and late spring and the prevalence of south-easterly winds at the commencement of the salmon season. During the spawning season the water in the rivers was so low that the usual quantity of fish did not get up. Having received information of an attempt at poaching by some parties during the spawning season, Mr. McDonald proceeded to the locality and when the parties found that there was a determination to put the law in force, the practice was almost entirely abandoned. Mr. McDonald remarks: as the law permits the taking the salmon in salt water until the 20th October, these fish are netted at the openings or mouths of harbours and the outlet of rivers while making for their spawning grounds in September and October. This permission, so late in the season, is very detrimental to the fishery interest of the county and to obviate the injury, Mr. McDonald suggests the close season to commence as early as the 15th August inside the entrance of the harbors and rivers, and the 15th September within three marine miles of the mouths of harbors and rivers.

Overseer Graham states that there has been no violation of the fishery law brought to his notice this season, and find a disposition on the part of the people generally to respect the law; the Indians and some miners from Westville and adjoining collieries at the Middle and West rivers are the only exceptions. The catch of salmon and herrings at Cape John has been less this season than last. The fish ladders on the East river have been all repaired and put in good order, and if saw dust and other refuse from saw mills could be kept out of the rivers, salmon and other fish would increase rapidly.

Colchester County.

Overseer Wm. Blair reports that the rivers in his district are generally well protected, and that the salmon are increasing rapidly; Stewiacke, however, being a long river, is not so well protected. Salmon ascend the Brookfield Brook eight miles to Graham's Mills; the pass here is insufficient, but Messrs. Graham have cheerfully promised to have it altered to suit my instructions. Mr. Blair thinks it necessary to raise the salary of Warden Pollock and give him an assistant; a great improvement can be made if this be done. In lower Stewiacke there appears to be a disposition on the part of some to evade the law and to assist each other in doing so, consequently it is difficult to get complaints made against the parties or proof for convictions. The poaching is carried on at night and it is no trifling job to watch the rivers almost every night during the months of September and October. Overseer Blair complains that this season's work in the above manner has injured his health and thinks of resigning his office unless his health improves. Overseer Bonyman reports that in consequence of scarcity of water in the streams in the fall the salmon could not get up to their usual spawning grounds; some few spawned on the fords at the head of the tide.

In the Economy district, Overseer Davidson reports that although the preparation for net fishing was less this year than usual, an increase of fish has been taken, chiefly Shad, the most important in these waters. Salmon fishing is not followed as a separate business; most of the salmon being taken in the shad nets, consequently the catch of this fish has not been so great as it might have been. The shad this year were of a superior quality. Mr. Davidson reports no violation of the fishery laws having come under his observation, and the fishermen, as a rule, comply with the regulations. The prospects of a more vigorous prosecution of the fisheries in this district for the coming season are encouraging.

Digby County.

James H. Morchouse, Overseer for this County, reports a considerable falling off in the deep sea fishing at most of the stations, but as prices have ruled much higher this season, no inconvenience will be experienced. He is pleased to record a marked improvement in the shad and herring fisheries at St. Mary's Bay, but regrets being compelled to repeat the record of last year, with respect to the mackerel fishery; these fish seem to have entirely forsaken these waters. He states that in consequence of a disagreement among the proprietors of the salmon fishery at Sandy Cove, very few salmon have been taken. It is deeply to be regretted that the herring fishery at Digby Basin should continue to shew no signs of improvement. Various causes have no doubt contributed to produce this state of things, but the fishermen contend that the sawdust from Bear River, which in large quantities passes into the waters of Digby Basin, is the cause of this failure. Whether this opinion is correct or not, it is certainly significant that the date of the failure of this fishery corresponds with the commencement of the lumbering business on the river. Last year a petition signed by some three hundred interested in this fishery was sent to the Department of Marine and Fsheries praying that Bear River be not exempted from the operation of the Act assented to on the 23rd May, 1873. entitled "An Act for the better protection of navigable streams and rivers." On receiving notice of this Act, I immediately notified all the mill owners on the Bear River waters, all of whom except E. Walsh, Esq., promised to abate the saw-dust nuisance. I accordingly prosecuted Mr. Walsh before Messrs. Tupper and Morse, Justices of the Peace. Mr. Walsh refusing to pay the fine, a warrant was issued against him, which has been in the hands of the chief constable for the county for some time. Whether Mr. Walsh will find means to evade the law in this instance, as he has in the past, remains to be seen. It certainly is indispensable in the interests of navigation that this nuisance should be stopped. I am informed by the harbour master, William Hennigar, Esq., who is an old ship master and has navigated this river for many years, that formerly vessels lay affoat where now a boat can scarcely float. This shows the necessity of a vigorous enforcement of the law which I hope to be able to accomplish.

Guysboro' County.

Overseer James A. Tory reports a decrease in the quantity of several kinds of fish, especially mackerel; codfish has been about an average catch; herrings has been a short crop, the summer run particularly. Salmon almost a total failure, owing to the prevalence of east winds about the time these fish were coming on the coast which fouled the water near the shore where they formerly resorted, and caused the fish either to return to the deep and clear water of the ocean or to immediately ascend the rivers, which at the time were very high. There was nothing more seen of these fish until after the season for catching, when they again appeared on the coast very plentifully and no doubt large numbers ascended to the lakes. The lobster fishery is on the increase. In addition to the four establishments now at work in this district, another has been erected and is ready for operation in the spring. The reduction in size (by Order in Council) will in the end prove injurious to these fish, as they will be finally reduced to small ones not worth catching. There has been but one complaint for violation of the Act during the season, and as the person pleaded ignorance the matter was allowed to pass over without a fine.

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Antigonish County.

Alex. W. McDonald, Overseer for Antigonish, says: I have but little to report different from what was given last year. Our rivers were well stocked with fish on their way to the spawning grounds; I find they pass easily over the fish-ways. The catch of salmon is not so large as I had reason to expect from the number that passed up the river last year, owing to the months of June and July being stormy, which prevented the setting of salmon nets. The amount of codfish taken is larger than that of last year. The amount of mackerel is about the same, as the parties engaged in taking these fish stopped operations early in the season owing to the low price. I have heard of few violations of the fishery laws. I seized six small skiffs, but did not succeed in capturing the parties, since then I have seen or heard of no violation of the law.

Cape Breton County,

Overseer Francis Quinan reports a short crop of alewives and herrings as well as of salmon in the harbor of Sidney and coast adjoining. This failure is attributed to the succession of heavy gales and unfavorable weather during the season, as late as the 7th July. Codfish and mackerel, however, by their abundance, compensated the fishermen in part for the failure in other kinds. Large quantities of lobsters have been taken around the shores. Although the salmon were driven off shore by the gales in June they returned in increased numbers at spawning. The gale of August, 1873, having torn up an immense number of trees, the rivers in consequence were very much blocked up, and not only interfered with sportsmen angling during the first part of the season, but also embarrassed the fish in their ascent in the autumn; but to the credit of the inhabitants of the district, they have done a great deal in clearing the impediments and opening up a passage for the fish. An excellent fish-ladder has been constructed by the owners of the mill on the Salmon River, which it is to be hoped will meet with a better fate than the last one erected by this company.

Overseer McDonald reports three lobster factories in operation and doing a fairly profitable business in his district. The boat and shore fishery has not been extensively and actively prosecuted during the season just closed, owing to the great destruction of boats and fishing appliances by the August gale of 1873. The catch of salmon was below the average, which is attributed to the lateness of the spring and the frequent storms that visited the coast at the commencement of the season. The yield in all kinds of pickled fish, cod, herring and mackerel, was greater than it has been for the past fifteen years. The prosecution of the salmon and lobster fishery on the Gabarus and Mainadieu stations was abandoned in September owing to the difficulty of attending to it through the wildness of the coast and the abundance of cod and mackerel giving a more profitable employment. The law is working well and to the satisfaction of all parties concerned.

The regulations are good and enforced to the letter.

Overseer York Barrington says that while it has been a bad year for herring and salmon in his district, it has been the best in many years for cod and some other kinds of fish. Herrings were not as abundant as usual, owing to the direction and force of the winds at the time they should have struck in. He states, however, that a great many were taken east of his district. He has had no occasion to impose any fines and feels satisfied that when properly directed all parties try to do what is right and legal.

Cumberland County.

Thomas H. Patton reports the erection of a lobster factory at Pugwash during the last season, which has been very successful, and it is the intention of the proprietors to extend their operations during the coming year. There has been a falling off in the quantity of salmon taken at the River Philip, owing to the low tides during the season for taking these fish, but after the season passed large quantities were seen in the rivers.

Overseer King reports a decrease in the number of men employed in the fisheries in his district; ship building being now more remunerative than fishing. Notwithstanding this the quantity of shad taken this year is in excess of last year, and the quality excellent. Salmon has increased this year largely, and the people are becoming more impressed with the value of this branch of the fisheries and are taking more care of the streams. He says:—"My attention has been given to clearing the ways to spawning grounds all through this section and I have partly succeeded; there remains, however, more work before all will be cleared." The decrease of cod taken was owing largely to the short stay these fish made on the shore, yet those who were prepared did very well for the time engaged. On the Maccan River, formerly a good spawning ground for salmon, there has been an unusual increase this season, which has led to violations of the law by spearing. Every means has been used to prevent this destruction. This river supplies the head of the bay to a very large extent, and I am in hopes this lawless practice will soon be broken up.

Richmond County.

Overseer Edward H. Ballam reports a large increase in the haddock fishery in his district over the preceding year. During the spring and summer months mackerel were very abundant and were taken in large quantities both with hook and seines. The fall catch of this fish was a failure, although the nets were kept out beyond the usual time. The salmon fishery is not so important as the foregoing, yet large numbers have been noticed ascending the river Inhabitants. The lobster canning business started by Lewis & Bros. in 1872, has been successful. This year at a large outlay they have built extensive wharves and stores at Decousse, within seven miles of Arichat, and, although commencing late in the season, they put up some 20,000 cans. The catch of cod fish and herrings was about the same as in the two preceding years

Overseer D. Cameron reports from St. Peter's a falling off generally in the fishery of the district under his jurisdiction, and attributes it to the loss of vessels, boats, nets, &c., in the memorable gale of the 24th August, 1873, which have not as yet been fully replaced. The laws are well complied with, and no complaints of consequence have been made since

the last report.

Victoria County.

Overseer John W. Burke reports that in order to do justice to his district, which is fifty miles in extent, he had to employ an assistant at each end, and attend to the centre himself, in order that the rivers might be carefully watched, particularly during the close season. This expense has been paid out of the allowance for travelling and incidental expenses. The course adopted by Mr. Burke appears to have had a good effect, from the fact that not a single violation of the law has come under his notice. Mr. Burke requires a Warden at Cape North, as the distance, thirty miles, is too far for him to attend to the duties required at that point. There are no vessels actually engaged in the fisheries in this district, but when the harbor now in course of construction is completed, this want can be supplied and will give employment to the young men at home instead of on board United States fishing vessels. There has been a falling off in this locality in the catch of salmon, the principal cause being a storm which destroyed a great many nets; while the nets stood, the catch seemed above the average. Mackerel have not been so plentiful this season as usual. The same may be said of herrings, and the quantity of cod fish as well as the quality, has been below the average. A lobster canning establishment was started in this district, but owing to some mismanagement, it has suspended operations. It will likely resume work in the spring.

Overseer Donald McRae, jun., reports from his district that there is evidence of the system of protection working to advantage. The Wardens discharge their duties well and poaching and night spearing are now seldom practised, one instance only of the violation of the law having been detected. Salmon have been more plentiful in the rivers than for many years; the rivers were low until late in the season, when they rose the salmon rapidly ascended to the beds. The coast fisheries were pretty largely presecuted during the past season, and the catch exceeded that of last year.

Inverness County.

Overseer Ross reports from Margaree that salmon were not as plentiful as last year. The catch of alewives, however, was nearly double, and he assigns as a reason for the increase of the last named fish, that the south-west river Margaree is kept free from all obstructions from the mouth to spawning ground in Lake Ainslee, giving free access for these fish to and from the lake, and he gives much credit to the vigilance of Warden Peter Coady for this improved state of things. Mr. Ross says :- "With the exception of Mr. Coady, the Wardens are negligent and indifferent and fall short in performing their duties as contemplated by law. In fact, between the Forks of Margaree and the head of Big Intervale, a distance of thirty miles, is altogether unprotected, excepting what is done by myself, and, in addition to my other travel, I have spent fourteen nights on this stream during the last summer, and have saved many a salmon from the spear. hoped the Department will take this matter into consideration and appoint officers who will carry out the law. But to obtain good officers a higher salary than \$25 will have to be given. It is doubtful if a man could be found in Margaree to accept the office for that salary, because a great many of our young men are determined to violate the law in every shape and form, thus making the duty of officers very onerous. I trust before long the system of leasing the rivers will be introduced into this Province; there is a growing feeling in its favour; it would lessen the cost of protection, increase the general revenue, and be a great benefit to the people generally." Overseer Grant reports that the catch in his district exceeds that of last year, that the Wardens perform their duties well, and that he has heard of no spearing, nor of nets being set contrary to law.

I would respectfully call your attention to the several recommendations appended to my last annual report, especially to those relating to the oyster and lobster fisheries. and to the licensing of fishing stations. Every year's experience convinces me that the development and protection of our fisheries will be best secured by their adoption.

Respectfully submitted,

W. H. VENNING, Inspector of Fisheries N. S., & N. B.

APPENDIX No. 11.

SPECIAL REPORT ON THE USE OF TRAP-NETS IN NOVA SCOTIA.

AMHERST, N.S., September 16th, 1874.

Hon. A. J. SMITH,

Minister of Marine and Fisheries.

SIR,—In compliance with instructions from your Department, I visited the various fish-traps in the County of Shelburne, and after spending several days among the fishermen in the immediate vicinity of them, and making careful inquiries into the whole sub-

ject from all parties, I beg leave most respectfully to report as follows:-

That if the policy of granting licenses to such traps is continued they will very soon be in use all around our shores, and the people will have large amounts of capital invested in them, and after a few years I found, on enquiry, it would be very difficult to discontinue them, except by giving three or four year's notice, as the materials used for these traps could not be utilized for any other mode of fishing, hence after encouraging them to invest in the business, it would be unfair to discontinue them without first giving time to use up the material they have on hand; therefore, if discontinued at all, it should be done at once.

That in my opinion they should be continued, under certain restrictions, for the following reasons, and I am forced to the conviction in consequence of the information I received on the spot, notwithstanding I was strongly prejudiced against them when I went there :—

1st. For the most part they take bait, i. e., spring mackerel, which cannot well be taken by any other mode.

2nd. They furnish bait for line fishermen that they cannot always get in any other

3rd. They give employment to many poor people to dress and cure fish, &c.

4th. If generally used under proper restrictions, hundreds of thousands of dollars

worth of fish would be taken more than at present.

5th. American fishermen come in from the banks periodically where these traps are located to buy bait and other supplies, knowing that they are sure of bait when they come, and in this way they will contribute largely to the business of the country and to the advantage of the fishermen themselves.

The Trap at Oak Point.

This trap took this year about three hundred quintals of pollock and about seventy-five barrels of mackerel, besides a few other fish. It is owned by eleven different parties or shareholders.

I inquired of one man who was making strong objections to the trap, how many pollock he took this season in the vicinity of the trap, and he replied forty quintals, which was about the average of the other fishermen in that locality, being considerably more than the average taken in the trap, and the herring are about as plentiful as usual.

I inquired of the leading men not interested in these traps, and who were strongly prejudiced against them in the outset, and they immediately told me that they had been strongly prejudiced against them, but they had quite changed their views on the whole matter, and some of them had made personal investigation, and found that most of the stories in circulation about these traps were unfounded, and for the most part put in circulation by unwise and indolent persons who were too lazy to make a decent living at any employment, that the petitions sent to Ottawa were largely signed by boys under age, and that the names of many were on them who had never seen them.

Robert Robertson, Esq., M.P.P., and his brother, both of whom take a lively interest in the fisheries and all matters affecting the welfare of the County of Shelburne, informed me that for two years they were prejudiced against these traps, particularly the one on John's Island, but that after making personal investigation, they found the stories put in circulation against them to be untrue, and that now they were decidedly in their favor, and their opinion was that it would be a mistake to discontinue them. This same view is held by all the leading and intelligent people in the county, so far as I could learn.

Josiah Swain, Esq., Collector of Customs, said:—I am of the opinion that the trap "is of great advantage to the community, and to the extent of hundreds of quintals of "fish per annum. I examined the trap myself and found but one dead pollock. The "stories about the traps killing the fish and contaminating the waters are largely

"exaggerated."

William Snow says:—"I have been frequency at the trap and examined it care"fully, and I believe it to be of incalculable benefit in many ways. I do not know what
"we should do without it, and the eleven men owning it do not catch more than ordinary
"fishermen with nets, but they save considerable in time and labor. I am entirely disin"terested in the matter, and have fished for forty years."

I give the evidence of these men merely as specimens of what I heard on all sides. Hon. Mr. Coffin will know the parties, and will be able to say as to their veracity and

disinterestedness.

I found no complaints about the three traps at Clarke's Harbor or the one at Duck Island, but, on the contrary, all persons are favorable to them so far as I could learn.

The principal complaints were against the trap at John's Island, and for the most part on the ground that it deprived many fishermen of their rights by occupying stations formerly used by certain parties for many years, with reference to which I found that although this is partially true, that these same parties set their nets a little further from the shore, and with full better results, and that nets for taking spring mackerel are, and were formerly, set from one to two miles farther out from the shore, and catch fully as many fish as those set inside.

When I was there the trap on John's Island was taken up for the season, and had not been in the water since early in July, and I would recommend that the license for the traps specify that they must be taken up by the first day of July. This will give the herring fishermen all they desire in that fishery. I am fully satisfied that with proper care this mode of fishing can be encouraged by the Department with great advantage to all concerned, and I would respectfully recommend that something like the following

restrictions be observed :--

1st. As to the location, care should be taken that the traps do not interfere with the

rights of net fishermen who have been in possession of these privileges for years.

2nd. The mesh of the nets or seines they use should not be over two inches; if they use larger they catch the smaller fish, and as they are of no value, they are left to die and rot in the waters, and this injures the fisheries.

3rd. They should be compelled to take all dead fish out of these traps every forty-

eight hours at least.

4th. Particular inquiries should be made as to what kinds of fish were intended to be taken by each trap, and the time named when it should be set and when taken up.

5th. A sufficient fee should be charged for each license, to enable the Government to employ a proper officer to see that the conditions are faithfully carried out.

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

> W. H. ROGERS, Fishery Officer.

APPENDIX No. 12.

Return showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, Quantity and Value of Fishing Material, Kinds and Quantities of Fish, and the Total Number of Men employed, &c., in the Province of Nova Scotia, for the Year, 1874. 5-91

	,slo rr e	Herrings, ba	3350 239 239 2860 2860 2860 2860 3461 10384 6158 402 13226 1532 16736 16736 16736 1153028
	cans.	Mackerel, in	1500 400 400 11400 11400 1920 1920 1920 1920 1900 1900 1900 19
ISH.	rrela.	Mackerel, be	375 50 60 822 8620 8620 8730 11350 87110 13822 16940 9255 5620 11738
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	. aler	Salmon, bar	75 168 145 52 52 54 54 64 474 324 324 324 324 329 2000 2000 4681
•	ers.	Value.	304 15300 515 515 1090 390 2700 9000 40900 13060 7590
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ra.		Men.	229 1933 46 235 235 345 980 1665 1936 1936 1938 1938 1938 1938 1938 1938 1938 1938
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		Number.	8 1 1 2 4 4 5 6 8 8 9 4 9 5 1 1 2 2 1 1 2 2 1 2 2 2 2 2 2 2 2 2 2
		District.	Cumberland Colchester Hauts. Kings Annapolis Digsty Yarnouth Shelburne Gueens Lunenburg Halifax Richmond Guysborough Guysborough Guysborough Guysborough Hotoria Invernees

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, &c.—Continued.

	Value.	\$ cts 7801.75 3576.00 1 10557.55 10557.
octs.	Fish used as man- ure, barrels.	6 500 500 60 60 60
Proi	Fish Guano, tons.	25 25 372 375 225 225 115 115
Fish Products.	Fish Oil, gallons,	440 72 1920 23105 19163 19163 19163 19225 1425 14
	Lobsters, cans.	95000 6000
	Oysters, barrels.	200 100 100 1342
	Eela, barrela.	62 321 321 105 49 428 503 60 97 1553
	Smelt, lbs.	8000 31200 2000 55000 55000 100500 1950 6300 2200 2200 240750
:	Trout, ibs.	2950 3500 1000 250 3250 3250 3270 18240 1575 4750 476645
	Bass, barrels.	350 400 600 600 1350
	Shad, barrels.	1700 3446 786 1628 1628 46 46
F FISH.	Halibut, lbs.	21100 12200 24450 60650 5400 113C00 80000 60000 60000 60000 60000 11400 64800 64800
KINDS OF FISH	Haddock, lbs.	34500 343700 343700 353660 536600 536600 536600 385770 385770 1425180 1425180 200000 147100
	Hake, cwt.	760 11315 3710 104 104 109 113000 13350 3350 3350 3455 200 200 200 200 200 200 200 200 200 2
·	Pollock, cwt.	870 440 10925 3584 2783 4650 500 199 155 168
	Cod Tongues and Sounds, barrels,	1328 1328 1328
	Cod, cwt.,	1834 340 259 815 11519 25329 72243 72243 62529 24400 121178 280 280 280 210 23 40510 24170 23 40510 24470 24470 24470 24470 24470 24470
	Alewives, barrels.	6:0 60 60 60 865 950 950 950 950 950 950 950 950 950 95
	Herrings, smoked, in boxes.	250 1000 1400 9720 26000
	District.	Cumberland Colchester Colchester SEHants FKing's FKing's FKing's FArmourth Shelburne Queen's Lumenburg Halifax Pretou Richmond Cape Breton Victoria Inverness

RECAPITULATION

Of the Yield and Value of the Fisheries of the Province of Nova Scotia, 1874.

Kinds of Fish.	Quantity.	Rate.	Value.
Herringsdo smoked	252,186 cans 122,258 barrels 80,460 cans 153,028 barrels 59,970 boxes 13,469 barrels 540,046 cwt 1,328 barrels 24,255 cwt 42,852 cwt 3,856,874 lbs 572,110 lbs 7,593 barrels 1,350 lbs 46,645 lbs 240,750 lbs 1,553 barrels 1,342 barrels 1,342 barrels 5,612,545 cans 290,582 gallons 1,260 tons	18 00 0 15 0 15 0 25 10 00; 0 15 4 00 0 25 3 50 3 50 3 50 0 06 0 06 0 06 0 06 0 06 0 06 0 06 0 06 0 06 0 05 0 0	84,258 00 81,529 80 4,035 00 63,046 50 1,222,580 00 12,069 00 612,112 00 12,742 50 9,296 00 84,892 50 149,982 00 231,412 44 34,326 60 60,744 00 2,798 70 14,445 00 13,977 00 4,026 00 1,403,136 25 188,878 30 18,900 00 696 00
			6,652,301 59

APPENDIX No. 13.

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	nd Vg		csns.	Маскетев, іп	17000 4000 38000 59000	
	tity a	8н.	rrels.	Mackerel, be	60 1379 1074 1430 300	
	Boats engaged in the Fisheries, Quantity and Value of Number of Men employed, &c., in the Province of New	KINDS OF FISH	,sns:	salmon, in o	69520 478376 69520 478376 154000 900 40000	
	isherie ed, &c	Kn	ked,	Salmon, Smo	69520 900 40000	
	the Femploy		ui t	Salmon, fresi ice.	6500 29520 740502 150000 38000 31800 410000 412572	
	ged ir Men		.ale	Salmon, barr	360 177 685 125 40	
E.	s enga ber of	ی	Weirs.	Value.	300 1000 420 40 10000 13250	
No.	Boats Num	ATERIA	M	.oN	84 7 4 88 2	
	ls and Total	FISHING MATERIAL	ts.	.sulsV	4716 21544 32211 49950 5520 5520 200 2669 28219 28219 28219	
APPENDIX	alue of Vessels and Fish, and the Total	Fr	Nets.	Fathoma.	7980 46224 52278 103000 18700 400 7830 7830 100000 36225 373447	
PPI	alue of Fis h ,	o.		Men.	216 1341 662 1625 324 324 40 40 170 650 869 869	
₹	mber, Tonnage and Value of Vessels and nds and Quantities of Fish, and the Total sar 1874.	BOATS EMPLOYED IN FIGHING.	Boats.	.enlaV	1501 59390 27310 13750 1576 252 256 256 3825 10000 48997	
	ınage juanti	OYED I		Number.	111 734 449 815 81 82 32 320 609	
	r, Tor and Q 1874.	IS EMPI		Men.	69 69 131 131 65 65 275	
			Vessels.	.enlaV	424 21000 5200 4430 3600 33700	
	JRN showing the Number, To Fishing Material, Kinds and Brunswick, for the year 1874	Vessels and	Ve	Tonnage.	670 670 158 393 141 1141 2518	
	owir g Ma vick			Матрет.	38 173	1
	RETURN Showing the Nu. Fishing Material, Kii Brunswick, for the ye			134 134	Restigouche Gloucester IN Orthumber land Keimoreland and Albert Votoria Carleton York. Kings, Queens Am Sunbury St. John Charlotte	

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, &c.-Continued.

zes. zwokeg,	, barrela,		gnes and , barrels.	'3MG	. Jwb.	Kinds.	KINDS OF FISH	. 1		.,	,	els.	,alerra	cens.		stop, tons.		nors.
agairraH od ni	səviwəlA.	Cod, cwt	Cod Ton Sounds	Pollock,	Наке,	Haddock	tudilaH.	rad ,badS	Bass, lbs.	sql 'anoa'l'	Smelt, lbe	Eels, barr	Oysters, l	Lobsters,	Fish Oil,	Eish Gua	Fish used ure, ba	, anlaV
	. 6561	450 81090	01	::	2650	4200	5000		31000 17800	4100	16000	130	2000	320000 586304 14841	4841	્ર જ્	00 1	\$ cts. 243803 50 646511 30
: :	2460 1000	2670 2805	620	270	5067 615	100 §2500	200	150	214819 160000	7620 5350	42000	6.5	1400 3980	58600 995000	2295	::	06 :	358737 39 428287 00
1750	180	026		150	483	10980	1500	2740 110 148 350	7864 8500	17000 1200 10000	306600	626 290	64		1290		8 : : :	101775 80 3202 00 12680 84 15170 00
399600	5920 25440	15 10875	, oo	10109	20110	1120 178758	10165	191	3000	200				220600 35674		2462	1000	25487 40 188756 95 661372 73
401350	42361	98855	299	10539	28925	247658	17165	4749	438073 66170	96170	915600	1976	2830	12830 2180504 56406		2482	2400	2685793 91

RECAPITULATION

Of the Yield and Value of the Fisheries of the Province of New Brunswick, 1874.

Kinds of Fish.	Quantity.	Rate.	Value.
do fresh in ice do smoked	110,420 lbs 1,402,440 cans 4,243 brls 59,000 cans 100,376 brls 401,350 boxes 42,361 brls 98,855 cwt 667 brls 10,539 cwt 247,658 lbs 17,165 lbs 4,749 brls 438,073 lbs 66,170 lbs 11,967 brls 12,830 brls 12,830 brls 12,830 brls 12,830 brls 156,406 gals 1,482 tons 1	\$ cts. 18 00 15 15 10 00 4 00 25 7 00 3 50 4 25 7 00 3 50 6 6 8 00 6 6 9 00 3 00 25 15 00 15 00 15 00 15 00 15 00 15 00 15 00 15 00 16 00 17 00 18 00	\$ cts. 24,966 00 213,858 30 16,563 00 350,610 00 42,430 00 8,850 00 401,504 00 100,337 50 148,263 50 420,133 75 4,669 00 36,886 50 101,237 50 14,859 48 1,029 90 37,992 00 26,284 38 3,970 20 54,936 00 17,703 00 38,490 00 545,126 00 17,703 00 38,490 00 545,126 00 17,703 00 38,490 00 545,126 00 17,703 00 38,490 00 545,126 00 17,703 00 38,490 00 545,126 00 17,703 00 38,490 00 545,126 00 17,703 00 38,490 00 545,126 00 17,703 00 38,490 00 545,126 00 16,663 90 37,230 00 1,200 00

APPENDIX NO. 14.

Schedule of Salmon Angling in the Rivers of the Provinces of Quebec and New Brunswick, during the season of 1874.

PROVINCE OF QUEBEC.

Name of River.	No. of Salmon.	Average weight in pounds.	Remarks.
		11 9	T 4 C 1 10 1
Du Gouffre	11 33	$11\frac{9}{13}$	Largest fish, 12 pounds.
St. Marguerite { E. Branch	$\{133\}$	13	,
A. Mars	75	13	River being re-stocked; fly-fishing curtailed
Little Saguenay	85	13	in consequence.
Anse St. Jean	71	13	
Laval	273	114	Angled in August; too late.
Romaine	215	$11\frac{1}{2}$ $17\frac{1}{2}$	Largest fish weighed 40 pounds.
Mingan Moisie	140 256	183	Largest fish weighed 32 pounds.
Natashquan	•••••	ļ	Not angled.
WatsheeshooRimouski	73	14 3	do Largest fish weighed 36 pounds; smallest,
	1	1116	9 pounds.
Metis Matane	49 146	16½ 12	Largest fish weighed 32 pounds.
Ste. Anne des Monts	140	191	Largest fish weighed 40 pounds; two, 37
Magdalen	10	12	pounds; smallest, 9 pounds.
York	135	16	Largest fish weighed 33 pounds.
St. John	29 65	12 15	do do 26 do do do do do
Malbaie]		Not angled.
Grand	255 14	$\begin{array}{c} 11\frac{1}{2} \\ 12 \end{array}$	Only partially angled.
Bonaventure	15	15	Largest fish weighed 32 pounds.
L. Cascapedia	3	1715	
G. Cascapedia	418	2311	Largest fish weighed 48½ pounds; six fish weighed 40 pounds and over; six fish weighed 30 pounds and over.
Matapedia	144	21	Largest fish weighed 46 pounds.
Upsalquitch (Lower Division	155 119	11 16	do do 452 do
Restigouche. Middle do	840	16	do do 36 do
(Upper do	252	16	do do 40 do
PRO	OVINCE O	F NEW BI	RUNSWICK.
Jaquet	8	10	
S. W Miramichi	168 654	123	Wester order Cintern and on the street find
Népissiguit	004	1112	Forty grilse. Sixteen rods on the river fishing regularly from 15th June to 16th Sept.

APPENDIX

STATEMENT of the Number and Value of Vessels, Boats, Nets, &c., for the

	v	essels		Boat shing	s emp	oloye	d				N	ets, t]	heir	Num	ber, i	Size,
Station.		Ves	sels.		E	oats	•	G	ill Nets	s.	s	eines.		Pou	nd N	ets.
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	No.	Rods.	Value.	Νo.	Rods.	Value.	No.	Rods.	Value.
Prescott Drummond Iroquois Rockpert Grenadier Island From Westerly limits of Township of Leeds to Cole's Ferry Gananoque		••••			1 1 1 12 8 3 2	\$ 20 20 20 600 400 35 25	3 3 3 12 8 5 2	29	290	\$ 100 87	1 1 1	20 20	\$ 50 60 75			*****
Wolfe Island Division. Amherst Island. Pigeon Island Charity Shoals Long Point. Cataraqui River Simcoe Island Bayfield Bay Openicon Lake Upper Gap Cranberry Lake Howe Island Irvine's Bay					2 3 2 4 3 6 1 2 1 2	30 65 25	4 4 8 9 11 2 4 3	100 70 90 8 	1000 700 900 80	360 32 172			••••			
Weller's Beach to West Point West Point to Point Peter Point Peter to Petiticoat Point Petiticoat Point to Black River			330		5 19 10 34	415 355	79	354	7080	345 1426 1568 2450	6)	30			
Point Ann Henessey Bluff Point Long Point Zwick Island Negro Island Ferry Point Lambert's Point Tyendinaga Station Robinson's Point Fredericksburgh			, , , ,		1 3 1 1 1	30 150 40 40 40 40 40 40	44 84 44 96 88 88 3	2	130	200	1 1 1 1 1 2	50 50 30 40 30 40 40 40	150 150 100 150 100 200 200 200			· · · · ·

No. 15. together with the Yield and Value of Fish in the Province of Ontario, year 1874.

Valu	ie, &	o .				Kinds,	, Qua	ntitie	es an	d Pri	ces of	Fisl	1 ,			17.	•	M-4-1
He	oop ets.	Soc	oop ets.	sh, brls.	h, lbs.	ih, No.	s,	orla.	ils.	ge, brls.			brls.	sh, brls.	of bris.		due.	Total.
No.	Value.	No.	Value.	White Fish, brls.	White Fish, lbs.	White Fish, No.	Trout, brls.	Herring, brls.	Sciscos, brls.	Maskinonge, brls.	Bass, brls.	Pike, brls.	Pickerel, brls.	Coarse Fish, brls.	Total No. of brls. of Fish.	Fresh.	Pickled.	Value,
••••	\$		\$			••••			••••			5 15 6	4 10 3	10 20 10	19 45 19	\$ 76 180 76	8	\$ 76 180 76
15	475				•••••		••••	•••	••••			9 <u>1</u>		118	91 118	38 472	•••••	38 472
28 52 15 20 18	1040 300 400 360					5600 4600 15000	96 100 40 				10 5 250 17 54 12 2 24 20 8	26 92 13 12 34 12	29 18 2 12	280 188 32 60 55	210 352 59 74 96 121	1008 940 2224 1824 1408 236 656 384 484	460	784 960 1008 940 2224 1824 1408 236 656 384 484 192
••••				761	78200 6411	1	30 4 158			2	14	17	1	1	127 391 38 963	374		1050 3910 374 9366
				83 12 5 12 25 60 12 3 15 18				337 10 120 20 22 140 10 110 44 50							420 22 125 12 45 82 152 13 125 62	820 80 700 400		170 650 120 350

APPENDIX

Statement of the Number and Value of Vessels, Poats, Nets, &c., for the year

			===											-		=
	v	essel		Boat ishin		ploye	ed.				Ne	ets, tl	neir I	Numl	ber, S	Size,
Station.		Ves	sels,		I	Boats		G	ill Net	5.	ß	eines	l.	Pou	nd N	lets.
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	No.	Rods.	Value.	No.	Rods.	Value.	No.	Rods.	Value.
Bay of Quinte Division.— Continued.										\$			S			\$
Big Bay (South side) Trenton Station Mud Creek Napanee River Hay Bay Cashmere Bay. Musquito Bay Westencoon Lake			••••		9 1 1 3 1 1	390 10 30 40 110 40 40 40	27 4 4 4 11 4 4 2	9		••••	i 	40	150			
Newcastle Division. Port Darlington Port Hope Lake Ontario Division.	••••	••••		••••	1	90 130	3	$\frac{2}{2}$			· 1	10 15				
Whitby. Shoal Point Frenchman's Bay. The Rouge Port Union. Gates' Gulley Leslieville. Ashbridge's Bay. Toronto Island. Port Credit. Bronte. Burlington Beach Burlington Bay. Wynona. Grimsby Twenty Mile Creek. Port Dalhousie. Four Mile Creek. Two Mile Creek. Two Mile Creek. Niagara. Queenstown. Navy Island Fort Erie Old Fort Fris. Port Maitland Dunville and Haldimand. Cayuga. Mount Healy.					21 1 3 3 3 7 22 1 1 7 5 4 4 2 22 1 1	144 300 700 100 655 400 49 360 1600 200 1100 15 800 500 200 200 200 200 200 200 200 200 2	13 5 45 5 22 2 2 8 4 16 4 4 9	5 8 8 9 18 10 44 5 10 5 10 5 7 7	180 290 2, 322 1, 362 1, 404 1, 240 4, 147 800 110 293 516 1, 284 601 1, 292 150	168 600 966 798 335 890 488 1634 276 96 199 460 206 436 300	1 1 5	1056 14 50 36 144 50 302 40 24 45	100 140 100 60 160 3000 240 250 650 250 600 150 185 180			

 ${\bf 15.--} Continued.$

together with the Yield and Value of Fish in the Province of Ontario, 1874.-Continued.

			1															
Valu	ie, &c	·. 				Kinds	, Qua	ntiti	es an	d Pri	ces o	f Fis	h.			Vs	due.	Total.
Ho No	oop ets.	Sec No	oop et.	h, brls.	a, Ibs.	h, No.		rls.	81	re, brls.			rls.	h, brls.	of brls.			
No.	Value.	No.	Value.	White Fish,	White Fish, Ibs.	White Fish,	Trout, brls.	Herring, brls.	Sciscos, brls.	Maskinonge, brls.	Bass, brls.	Pike, brls.	Pickerel, brls.	Coarse Fish, brls.	Total No. of Fish.	Fresh.	Pickled.	Value.
	*		\$								1					_\$	*	\$
5 5 20 12	110 110 400 240		200	42 10 6				445	••••			••••		110 280 100 100 5	110 110 280 100 100	1,120 400 400		2,645 115 75 440 1,120 400 400 20
••••			 				14 30	58						5	25 46	195 384		195 384
	2 12		222 2	50 57 107 2 15 10 25 30 90				20 3 159 20 1	566	30	10 3 11 3 11 7 2 19	20 35 3 3 3 4 3 1 1 1 1 1 1	55 12 13 12 20 16 12 20 16 12 20 16 11 20 20 20 20 20 20 20 20 20 20 20 20 20	31 31 32 32 32 32 33 32 33 34 35 36 37 37 37 38 38 39 30 30 30 30 30 30 30 30 30 30 30 30 30	19	90 90 130 80 130 1		60 90 100 80 130 80 350 268 1,673 224 944 3,563 260 1,212 20 330 234 363 371 1,627 1,094 988 224 2,276 28 1,094 2,276 2,276 2,27

APPENDIX

Statement of the Number and Value of Vessels, Boats, Nets, &c., for the year

	v	esseli	and F	Boat ishing	s em;	ploye	d				Ne	ets, t	heir I	Numl	er, S	ize,
Station,		Ves	sels.]	Boats	•	G	ill Net	8.	£	Seine	3	Pou	nd N	ets.
· .	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	No.	Rods.	Value.	No.	Rods.	Value.	No.	Rods.	Value.
Lake Erie Division.			\$			\$				\$			\$			*
Rainham. Sandusk Creek Evans Point Port Dover Normandale Turkey Point. Long Point. Rond Eau Point Pelee Island. Point Pelee.		• • • • • • • • • • • • • • • • • • • •		3		32 15 12 150 5 205 160 191 125 1110	4 2 2 16 4 24 5 10 3 70	10	470 140 200 934 	75	1 1 1 8	55	50 90 75 1075 360	4 2	100 135	4000
Detroit River Division.		! 												1		
Belle Isle Peach Island Fighting Island. Bois Blanc Island. Grass Island Turkey Island Detroit River.					16 4 3	145 320 100 60 50	21 14				6 6 16 3 4 18	130 350 71 60 85	950 2400 500 650 550			
Lake St. Clair Division. Lake St. Clair	1	10	400	6	5 22						5 21		385 1315			
Lake Huron Division.																
Moore Sarnia & Indian Reserve. Bosanquet. Port Frank Bayfield. Goderich Kincardine. Inverhurou. Southampton River au Sable					13 5 3 10	585 225 605 1105 2590 1100	28 74 42 9 18 39 15 8 30 56	135 449 977 311	9,830 21,420	3980 8265 3420 800	7	533 494				
Whitefish Island. Burke's do Big do Snake do Main Station Island Reaman Island Sack do				••••	1 1 4 3 5 1	150 150 500 600 875 200 75	13 8 12 9 15 3	35 30 160 145 160 60 35	3520 3190 3520 3520 1320	175 150 940 920 895 420 150	1	50 60	800 400			

15.—Continued.

together with the Yield and Value of Fish, in the Province of Ontario, 1874.—Continued.

Valu	e, &	· · ·		-		Kinds	, Qua	ntiti	es an	d Pri	ces o	f Fis	h.			V	due.	Total.
Ho Ne	op ts.	Se Ne	oop ta.	, brls.	ı, lbs.	, No.		la.		e, brls.			rls.	, brls.	of brls.	*	aue.	Total.
No.	Value.	No.	Value.	White Fish, brls.	White Fish, lbs	White Fish, No.	Trout, brls.	Herring, brls	Sciscos, brls.	Maskinonge, brls.	Bass, brls.	Pike, brls.	Pickerel, brls.	Coarse Fish, brls.	Total No. of Fish.	Fresh,	Pickled.	Value.
	8		8			<u>}</u>												8
				6 3 2 27 1 11 23 52 10		41,000		10 2 82 69 320 24 865		1 1 6 11	3 1 30 140 640	1 2 1 34 23	 5 5	17 39	2 51 12 227 234 418 242	20 376 56 1,056 1,143		60 70 20 376 56 1,056 1,143 2,304 1,052 12,393
•••						30,800 33,600 196000 37,800 22,400 28,200 149000		100				••••		120	386 231 282	3,360 20,580 3,812 2,268		3,080 3,360 20,580 3,812 2,268 2,820 14,925
••••		21	40)						 			684	85 26	85 948			340 3,792
••••				40 800 112 922 1913 715 190			3476 138 416 866 284 135	174			32		350 103)	. 253	3,150 13,300 3 2,530 2 14,250 2 27,790 9 9,990	6,655	9,805 13,300 2,530 14,250 27,790 9,990
				1280 150 70 60 360 156 177 95			657 1200 800 500 160 70 137 55	470 345 580	5 }						1937 1350 870 560 990 565 894 130		13500 8700 5600 7550 3925 6040 2380 850	8,700 5,600 7,550 3,925 6,040 2,380

APPENDIX

STATEMENT of the Number and Value of Vessels, Boats, Nets, &c., for the year

	Ve	sels	and F	Boat shing	s em	ploye	×d		<u> </u>	•	Net	s, th	eir l	Tumb	er, S	ize,
Station.		Ves	sels.		P	oats.		G	ill Nets	s.	s	eines.		Pou	nd N	ets.
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	No.	Rods.	Value.	No.	Rods.	Valve.	No.	Rods.	Value.
Lake Huron Division.— Continued.			\$			8 \				\$			\$			\$
Golden Valley					3 3 4	300 150 150 180	9 9 9 8	95 85 60 4	1870 1320	510 369 305 130		•••			••••	••••
Georgian Bay Division. Vail's Point Cape Rich Meaford Thornbury Collingwood Notawasaga River Penetenguishene					4 3 5 5 7 2 2	200 150 420 400 560 150 90	8 6 12 12 16 4 5	4 5 8 10 14 1 4	300 750 900 15001	200 250 600 750 000 150 200		250				
Lake Huron Division. Missasaga Killarney Cove Islands Providence Bay Michael's Bay Green and Duck's Islands Cockburn Island La Cloche Off Inlet Shawanaga Lonely Island West Bay Sheshewaning Bayfield Lake Wolsey Fraser Bay Mink Islands Limestone Island Penetenguishene Manitoru Island	1	20	1600 1000 2000 2500	3 3 3	100 50 20 115 10 10	500 200 1500 1000 200 500 3000 1000 600 600 150 200 600 600 200 600 600 600 60	6 6 6 30 20 40 40 40 40 10 10 10 10	50 30 30 675 3 10 80 600 150 100 20 40 40	2500 2000 500 600 13500 1200 12000 2000 2000 400 400 800 700	1000 500 125 150 4500 30 60 400 300 0 400 0 500 0 500 0 100 0 100 0 125 1 150 1						
Lake Superior Division St. Mary's Rapids Dog River Pie Island	1				1	284 200 180	12		264	60	j	40	7			

15—Continued.

together with the Yield and Value of Fish, in the Province of Ontario, 1874.—Continued.

Valu	ie & c					Kinds,	Qua	ntitie	s and	d Pri	ces o	f Fis	sh.			V a	lue.	Total.
Ho Ne	op ts.	Sec Ne		sh Brls.	sh lbs.	sh No.	20.	bris.	rls.	ge, brls.		*	brls.	sh, brls.	Total No. of brls of Fish.			
No.	Value.	No.	Value.	White Fish Brls.	White Fish lbs.	White Fish No.	Trout, brls.	Herring, brls.	Sciscos, brls.	Maskinonge, brls.	Bass, brls.	Pike, brls,	Pickerel, 'brls.	Coarse Fish, brls.	Total No. Fish.	Fresh.	Pickled.	Value.
	\$		\$												t t	\$	\$	3
0.000 0.000 0.000				92 45 50 70			70 51 59 1 50	190 98 180	••••		••••	• • • •			352 194 289 220		. 2570 1450 1990 2200	
•••				100 180 400 600 500 120 20	•••••		270 300 600 650 700 190 50							12 10	389 480 1010 1262 1290 400 73	1820 7000 10900 9440 2200	1750 3000 3050 1148 3000 1320 300	4,820 10,050 12,048 12,440 3,520
				36 120 25 75 1650 150 450 140 200 50 50 50 150 150 150 140 150		1	850 100 100 750 120 100 100 120 100 100 100 100 100 10	100							977 245 150 30 75 2500 2500 1200 50 19 50 200 19 40		970 2450 300 750 25000 25000 540 170 2500 2000 5000 5000 5000 5000 2,000 5000 400	2,450 1,500 300 750 25,000 2,500 170 2,500 12,000 2,000 2,000 2,000 500 500 500 500 500 500 500 500 500
••••		5	3 48	14			30 5 0			1.5					217 30 6 4	1	2,170 300 640	300

APPENDIX

Statement of the Number and Value of Vessels, Boats, Nets, &c., for the year

	v	essel	s and	Boa ishin	ts em	ploy	ed				N	ets,	their	Nun	ıber,	Size,
Station.		Ves	sels.			Boat	S.	G	ill Ne	ts.		Seine	8.	Pot	ınd N	Tets.
-	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	No.	Rods.	Value.	No.	Rods.	Value.	No.	Rods.	Value.
Lake Superior Division.— Continued.			\$			\$				8			8			\$
Pays Plat (N.). Grand Shaganash. Lake Nepigon Roche de Bout Gros Cap Mamainse. Wood Location Fort William Pays Plat (S.).	i	10	••••	• • • • • • • • • • • • • • • • • • •	1 24 1 1 6 1	200 75 445 100 50 500 50 75 100	6 34 5 2 11 2	59 6 6 11 4	154 1,178 132 132 2,500 76 40	35 175 30 30 1300 20 75	••••					
Lake Simcoe Division	••••	. .		•	8	250	17	7	3,250	495	2	100 0	150	••••		
Mississippi Division. Carleton Place Perth	••••	••••	•••	• • • •	• ,	••••	••••	••••	••••		••••	•••	•••	••••	•••	••••
Gananogue Division. Gananogue Lake Henderson Lake	••••	•••	••••	• • • •	2			5	100 100		****	••••	••••	••••	••••	••••
Canarea	••••		••••	••••	30	240	30		••••			••••	• • • •	••••	•••	

together with the Yield and Value of Fish, in the Province of Ontario,

1874.—Continued.

Valu	е, &с					Kinds	, Qua	ntiti	es an	d Pri	ices o	f Fis	sh.			₩.	lue.	Total.
H _c Ne	op ts,	Sco	op ts.	, brls.	, Iba.	1, No.		ls.	ls.	é, brile.			rls.	, bris.	f brls.		100.	TOWN.
No.	Value.	No.	Value.	White Fish, brla.	White Fish, Ibs.	White Fish, No.	Trout, brls.	Herring, brls.	Sciscors, brls.	Maskinongé, bris	Bass, brls.	Pike, brls.	Pickerel, brls.	Coarse Fish, bris.	Total No. of brls. of Fish.	Fresh.	Pickled.	Value.
	\$		8													•	•	
	••••			35 720 40 210 12 120 36 1176			44 205 6 150 29 1100 70 308		,,,,,						79 925 40 210 18 270 65 2276 70		796 9,250 400 2,100 180 2,700 650 22,760 700 4,390	9,250 400 2,100 180 2,700 650 22,760 700
••••											12	66	20	5	83 20	332 80		332 80
18	740 220	:		80) 		60	\ \ \ 			160	45		327	672	3,528		3,528
••••									ļ			 		98	98	392		892

APPENDIX No. 16.

RECAPITULATION of the Number and Value of Vessels, Boats, Nets, &c., together with the Yield and Value of Fish in the Province of Ontario, for the year 1874.

FISHING VESSELS, BOATS AND NETS EMPLOYED.

	Number.	Tonnage.	Rods.	No. of Men.	Value.
Vessels Boats Gill Nets Seines Pound Nets Hoop Nets Scoop Nets	251 16		195,139 8,323 1,190 204,652		\$ cts. 11,533 00 70,365 00 64,605 00 31,212 00 8,600 00 5,275 00 157 00 191,747 00

KINDS, QUANTITIES AND PRICES OF FISH.

	Barrels,	Pounds.	Number.	Va	lue.	Total Value.
				Fresh.	Pickled.	
Whitefish. do do Trout. Herring. Sciscos. Maskinonge. Rass. Pike. Pickertl Coarse Fish.	13,951 7,959 293 413 1,576		569,112			1,904 50 1,652 00

APPENDIX No. 17.

SYNOPSES OF FISHERY OVERSEERS' REPORTS IN THE PROVINCE OF ONTARIO, FOR THE SEASON OF 1874.

CORNWALL, PRESCOTT, BROCKVILLE AND GANANOQUE DIVISIONS.

JOHN MOONEY,
HUGH THOMPSON,

JOHN WALLACE,
HENRY HUNT,
Jos. L. THOMPSON,

Guardians.

COMPARATIVE STATEMENT of the Yield of the Fisheries in this Division.

	1872.	1873.	1874.
Pike and Bass, brls. Pickerel, brls Coarse fish	41 17 45	60 14 108 182	35 17 158 210

With a view of affording better protection to fish in the river St. Lawrence, no fishing with nets of any kind, spears or set lines, was allowed during the season between Gananoque and Cornwall. The beneficial effects of this measure begin already to be felt.

KINGSTON DIVISION, -WOLFE AND AMHERST ISLAND.

P. KIEL, Overseer.

COMPARATIVE STATEMENT of the Yield of the Fisheries in this Division.

	1872.	1873.	1874,
Whitefish brls. do lbs. do per 100 lbs. Trout, brls. Herring, brls. Pike and Bass, brls. Fickerel, brls. Coarse fish, brls	554 12 77 27	151 1,500 3,950 418 12 182 56 217	302 272 591 110 639
TotalValue	1,146 \$8,310	\$8,945	1,914 \$11,100

The number of men engaged fishing in this division amounted to sixty, or five less than last season. The value of gill nets used also fell short of \$922, on that of the previous season, whilst the value of hoop nets exceeded that of last year by \$900. The reason of this difference is partly due to hoop net being so much safer than gill-net fishing, considering the men's lives as well as fishing material, and partly on account of great demand on American markets of the coarse kinds of fish caught with hoop-nets.

Salmon trout was plentiful, and the weather proved generally favorable for that fishery. The decrease of 146 barrels in the catch is entirely due to the small quantity of nets used, and the small number of men engaged fishing, as compared with previous years. The demand for this kind of fish was dull on the American market, and prices offered nearly 25 per cent. below the usual quotations. Whitefish were abundant and a large catch was made during the summer months. Had these fish visited their usual spawning grounds on the shores of Wolfe and Amherst Islands during the fall, the increase in yield would have been still larger.

Fishing with hoop-nets, principally for bass, pike, pickerel, bull-heads, sunfish and eels, shows an increase over previous years. It abundantly proves that there is no decrease in the quantity of fish frequenting drowned lands and swamps in the neighborhood of Rideau River, and elsewhere. It must be borne in mind that no hoop net fishing was done during the summer months in this division, and that the fish were consequently left unmolested during that portion of the year. Taken altogether, the fishing season was a propitious one and fishermen generally reaped a fair remuneration for their labors. No considerable loss of nets occurred, and the law was generally well complied with.

PRINCE EDWARD COUNTY DIVISION.

JOHN G. HICKS,
WM. PLEWS,
W. A. PALEN,
PETER HUFF, JR.,
DAVID CONGER,

COMPARATIVE STATEMENT of the Yield of the Fisheries in this Division.

	1872.	1873.	1874.
Whitefish, brls. do fresh, lbs. do fresh, No Trout, brls Herring, brls. Pike and Bass, brls. Pickerel, brls. Coarse fish, brls. Maskinonge, brls.	148 140 150 15 5		1,242 84,611 112 192 71 7 5
Total		1,554	1,519
Value	\$15,118	\$16,877	\$14,670

Whitefish were not so abundant as usual and the practice of setting further in the lakes inaugurated this season tells on the catch of those fishermen who, for want of large boats, are unable to go so far out. Salmen trout was abundant and of good size.

LENNOX AND ADDINGTON DIVISION.

HUGH RALSTON, Overseer.

This officer was appointed at the close of last season for the lake shore and inland waters of the counties of Lennox and Addington. Owing to the short period he has been in office, he was unable to make any detailed report or supply fishery statistics; but he states he everywhere meets with a desire to comply with the fishery laws and regulations.

BAY OF QUINTE DIVISION.

CHAS. WILKINS, Overseer.

COMPARATIVE STATEMENT of the Yield and Value of this Division.

	1872.	1873.	1874.
Whitefish, brls	3.U/D	77 20 2,711 120 1,250	232 1,251 595
Total		\$22,588	\$12,090

By the above statement it will be seen that the quantity of whitefish caught this season is nearly three times that of 1873, and that the quantity of herring is on the contrary one-half below last year's figure. This is attributed to the fact that the weather being very warm and dry during last summer caused the herring to move at the surface of the water, and the whitefish to seek coolness in deep waters. In this way herring generally escaped the nets.

The salmon fry laid in the River Trent and Moira, by Samuel Wilmot Esq., are doing well, and it is hoped that in a few years these rivers, once abounding with salmon, will

be entirely restocked.

NORTHUMBERLAND DIVISION.

CHARLES GILCHRIST, Overseer.

The limits of this division comprise that part of the shore of Lake Ontario fronting on the County of Northumberland, including Rice Lake. The beautiful waters of Rice Lake having been set apart for the natural propagation of fish, no fishing whatever can take place therein except by special permits granted by the fishery overseer, under instructions from this Department. One hundred and thirty special permits were so granted during the course of last season to Indians settled on the lake shore, residents and American sportsmen. The fishery laws were strictly enforced and reluctantly obeyed. A remarkable increase of fish is already noticeable in these waters.

ERIE, NIAGARA AND PART OF LAKE ONTARIO DIVISION.

J. W. KERR, Overseer.

COMPARATIVE STATEMENT of the Yield of the Fisheries in this Division:-

	1872	1873	1874
Whitefish, brls. do lbs. do per 100. Trout, brls. Herring, brls. Sciscos, brls. Maskinouge, brls. Pike and Bass, brls. Pickerel, brls. Coarso Fish.	166 512 219 8 280	498 93,958 466 55 405 288 12 488 444 780	96,500 99 405 134 42 620 723 798
Total:	2,714	3,436	3,303
Value	\$16,601	\$25,899	\$24,783

The apparent falling off between this and last season's yield of the fisheries is accounted for by the fact that this division being found too large for a single officer, was divided, and part thereof placed under charge of Mr. J. A. Blackhouse. Full details on the fisheries of that division will be found in Appendix No. 15; but another cause in the partial failure of the fishing was the boisterous and stormy weather which prevailed during nearly the whole season. It may also be remarked that the yield of this season, although not equal to that of last year, is above that of 1872.

The fisheries of this division are well protected. Fines were imposed last spring on persons fishing illegally, during close time, for pickerel in Niagara River. Gill nets and boats were also seized, and fines imposed on five persons for catching white fish with nets of too small mesh. The overseer of this division also seized, in Hamilton, fourteen barrels of white fish caught at Collingwood during the close season. This fish was sold according to law, and the net proceeds of the sale, amounting to \$90, paid into the Department. Mr. Kerr was subsequently instructed to proceed to Collingwood, in order to institute proceedings against the persons who had forwarded this fish. Mr. P. D. Bates, a fish dealer, of Hamilton, was also prosecuted, convicted and fined for receiving fish caught during close season at Collingwood.

Lake Ontario Salmon.

There are indications that the numbers of salmon are increasing in Lake Ontario. Five were caught last season in hauling seines.

River Credit.

The guardian on that river reports that from the 10th to the 30th November last, between Indian Village and Springfield, he saw every day large numbers of large and small salmon on the shoals and deep holes of that stream, counting no less than 200 grilse in one day.

Highland Creek.

Water kept very low in this creek, the mouth being barred by sand accumulating from the action of storms in Lake Ontario. An opening had to be practised. Only four salmon were noticed in it last fall.

The Rouge.

Salmon were also noticed in this river last fall on the breeding grounds.

Duffin's Creek.

Taking into consideration the low state of the water in this creek, the quantity of salmon noticed therein during the fall was very satisfactory. About 120 parent fish were counted from time to time during the spawning season. They could easily be seen, owing to the low state of the water, which prevented their going any further than the road bridge, compelling them to stay within limits extending about half a mile. A very large fish of upwards of forty pounds made its appearance. The other salmon averaged from ten to twenty-five pounds. About 100 grilse were also seen. This shows that salmon is on the increase, and that a few years more of good protection will still further improve this fishery. Several thousand salmon fry from the Government Fish Breeding Establishment at Newcastle, Ont., were last spring placed in the Twelve Mile Creek at Bronte. This stream was formerly a salmon river.

With the desire of practically illustrating the great improvements which had taken place in our lake fisheries, owing to well understood protection, this overseer exhibited some fine white fish from Lake Ontario, weighing eight pounds a piece, and salmon trout, at the Central Fair held in Hamilton in the early part of October, 1874, and a special prize was awarded him for the articles exhibited.

NORFOLK AND HALDIMAND DIVISION.

J. A. BACKHOUSE, Overseer.

COMPARATIVE STATEMENT of the Yield of the Fisheries in this Division :-

<u> </u>	1872	1873	1874
White fish, brls	235	174 21,300 106	73
", No Herrings, brls Pike and Bass, brls Pickerel, brls Maskinonge, brls	212	96 114 136 10	163 96 129 19
Coarse Fish		812	65 545
Value	\$5.044	\$5,063	\$2,781

This division is composed of the Counties of Norfolk and Haldimand, and was in the course of the present year detached from Mr. Kerr's former district. Owing to a prevalence of strong winds, gill net fishing, which mostly prevails in the eastern part of that division, was not so successful as usual, the nets being partly destroyed and carried away. The number of barrels of fish caught amounts to 541, valued at \$2,781.

RONDEAU DIVISION, LAKE ERIE.

JOHN MCMICHAEL, Overseer.

The following Statement exhibits the Catch and Value of Fish in this Division :-

	1872	1873	1874
White Fish, brls. Herring, brls. Pike and Bass, brls. Pickerel, brls. Coarse Fish, brls.	125 124 30 79	138 155 10 48	53 320 35 11
Total		351	419
Value	\$1,936	\$1,689	\$2,214

Although very satisfactory, this result would have been a great deal better had fishermen been enabled to fish during the whole season, but they were prevented from doing so after the month of July, the fish keeping in the deep waters of the lake.

DETROIT RIVER AND POINT PELÉE DIVISION.

EDWARD BOISMIER, Overseer. ZENEAS QUICK, Warden.

The following table of the Fisheries of this Division represents a considerable increase over the previous years:—

	1872.	1873.	1874.
Whitefish, brls		2,655 48,347 855	2,794 538,800
Herring, brls Pike and Bass, brls. Pickerel, brls	658 93	1,035 111 73	1,314 780
Coarse fish, bris		572	203 352
Total	3,744	4,778	5,343
Value	\$42,333	\$61,776	\$65,790

Whitefish were abundant from the 8th until the 28th October; the quantity caught during that period being almost double that of last season. On the 28th, a storm which drove the fish into deep water, also destroyed several pound-nets. With the exception of this instance the weather was very fine and favourable to the fisheries of this division. Fishing was generally successful.

A considerable increase is noticed in the whitefish, pickerel and maskinonge fisheries.

SYDENHAM AND LAKE ST. CLAIR DIVISION.

F. McRAE, Overseer.

The value of the yield of fisheries in this division for the past three years was as follows:—

In 1872	\$8,255
<u>In 1873</u>	8,877
In 1874	11,820

Being an increase of \$3,000 over 1873, and \$3,600 over 1872.

Special guardians were, during the season, placed at the mouth of the Thames River, at Chatham, Cashmere and London, in order to regulate and protect the valuable spring fishing of this stream and enforce the provisions of the fishery laws relating to saw-dust and mill rubbish, and the building of fishways.

THAMES RIVER DIVISION.

PETER McCann, Overseer.

This officer has charge of that part of the Thames River between London and Thamesville; the lower part of the river and the mouth being under charge of special guardians. The principal part of the work consists in enforcing close seasons for breeding fish during the spring, to prevent saw-dust and mill rubbish being placed in the water, and the building of fishways. Mr. McCann reports eleven fishways on mill-dams between Cashmere and St. Mary's, most of which are completed. Two new ones were in course of construction during the fall, so as to be ready for next spring's run of fish.

GRAND RIVER DIVISION.

HENRY LAWE,
HENRY GRIFFITHS,

Overseers.

The limits of the first of these officers extend from the mouth of the river to Caledonia, and those of the second from Brantford upwards. The principal part of their duties relate to the enforcement of close seasons during the spring fishery, and building of fishways, and to prevent saw-dust and mill rubbish being placed in the river.

Mr. Griffiths states that the fishery laws were generally well complied with, and that, with but one or two exceptions, he found every one disposed to build proper fish

passes on their mill dams.

SARNIA DIVISION.

D. McMaster, Overseer.

The yield of the fisheries in this division is as follows:— Whitefish Herrings Coarse fish	brls. brls	40 2,019 35 3
Total		2,412
Value	•	11.907

The sesson was very unfavourable to the fishermen in this division. The catch, as well as the prices obtained for fish were poor.

GODERICH DIVISION.

A. C. McKinnon, Overseer.

COMPARATIVE STATEMENT of the Yield and Value of the Fisheries in this Division.

	1872.	1873.	1874.
Whitefish, brlsdo lbs	3,329	3,670 732,000	7,274
Trout, brls. Herring, brls. Bass, brls,	$\substack{1,276\\64}$	1,180 307	6,259 2,353 32
Pickerel Coarse fish.	124	82	103
Total	5,078	5,239	16,021
Value	\$36,737	\$34,415	\$146,635

Owing to the good effects of protection, the increase in the fisheries of this division is very noticeable. Another decided improvement lies in the fact that fishermen began this season to build ice houses and pack their fish in ice, to send it to markets, instead of selling it as usual to farmers at two cents per pound; thus securing better prices than before.

Fishways were built during the year upon the following streams:—On the north branch of the Saugeen River, four; two on Mud river, one on Snake Creek, and three on Otter Creek. With proper care and by keeping the waters free trom saw-dust and mill-rubbish, the Saugeen River and its tributaries may still, undoubtedly, become what they were before—good trout streams.

GEORGIAN BAY AND INDIAN RIVER PENINSULA DIVISION.

G. S. MILLER,
JAMES PATTON,
SAMUEL FRAZER,

COMPARATIVE STATEMENT of the Yield and Value of the Fisheries in this Division :-

·	1872.	1873.	1874.
Whitefish, brls do fresh, lbs	850	1,283 2,000	1,990
Herring, brls.	440	1,622	
Sturgeon, bels. Coarse fish.	30	20	60
Total	1,320	2,985	5,120
Value	\$6,450	\$19,552	\$49,040

Owing to the large extent of coast to be protected, and the difficulty of preventing illegal fishing during close seasons, it was found necessary for the better protection of fish to separate this district into three divisions. The former officer, Mr. Miller, has charge

of that part of the coast extending from Cape Hurd to Owen Sound; Mr. Patton's limits extend from Port Rich to Collingwood, and Mr. Frazer's from Penetanguishene to the mouths of the Rivers Severn and Muskoka. With this addition in the number of fishery officers, it is to be hoped that violations of the law, similar to those which occurred last season, will not be possible.

MUSKOKA DIVISION.

WM. E. FOOTE, Querseer.

The present division comprises Lakes Muskoka, Rosseau, Joseph, Lake of the Woods and the Maganetawan River. These waters, which teem with all sorts of fish most dear to anglers, such as speckled trout, bass, &c., have, owing to increased facility of communications and speedy travel, become the rendezvous of hundreds of anglers from all parts of Canada and the States. They were entitled to special consideration by the Department, and placed during the course of last season under the guardianship of Mr. Foote.

LAKE HURON DIVISION.

G. B. ABREY, Overseer.

The following table shows the yield and value of the Fisheries in this Division:-

	1872.	1873.	1874.
White Fish, brls. Trout Pickerel	2,182		3,332 2, 3 05
Herring.			5,837
Total Value		\$22,807	\$57,370

The above shows a satisfactory increase over previous years, the weather having been very fine throughout the fishing season. Most of the fishermen in this division are Indians, which accounts for the small amount of fees collected. It is also very difficult to procure reliable fishing statistics, fishermen pretending to believe it is in their interest to under-state their catch.

LAKE SUPERIOR DIVISION.

JOSEPH WILSON, Overseer.

The product of the fisheries in this division for the past season shows a considerable increase over the two previous years. The following statement gives the Yield and Value of the Fisheries for 1872, 1873 and 1874:—

	1872.	1873.	1874.
White Fish, brls	1,958	2,275 7,000	2,580
White Fish, brls	1,252 70	1,500	2,580 1,684
Total	3,282	3,775	4,264
Value	\$19,384	\$18,045	\$42,640

Fishing was favorable, the yield being somewhat over that of last season. Prices were also higher, so that fishermen had every reason to be satisfied with the results of the season.

Owing to complaints made in previous years of poaching and waste of speckled trout in River Nepigon, the Department determined upon placing a special guardian at the mouth of the river, with instructions to allow no strangers to fish except under special permits. Sixty-six "permits" were issued free to gentlemen from the United States during the present season.

LAKE SIMCOE DIVISION.

A. McKenzie, Overseer.

COMPARATIVE STATEMENT of the Yield and Value of the Fisheries in this Division:—

	1872.	1873.	1874.
White Fish, bris	60	4.940	116
Trout, bris.	46	2,930	308
number fresh. Trout, brls. number fresh. Herring, brls. Maskjinonge, brls. Base, brls.	7	1	30
Bass, bris		75	
Total	113	78	454
Value	\$1,010	\$1,677	\$4,390

LAKE SCUGOG DIVISION.

A. J. HARRINGTON, JNO. MCALLISTER, Overseers.

The injurious practices of spearing, and allowing sawdust and mill rubbish to fall into the streams, had nearly ruined these waters. It was therefore found necessary to set them apart for natural reproduction. The beneficial effects of increased protection are rapidly being felt, and there is every reason to expect that a few years' practical attention will restore the waters of Lake Scugog to what they formerly were.

CHARLESTON AND GANANOQUE DIVISIONS.

DAVID HAMILTON, Guardian.

Most of the fishing in these waters is done by residents for local consumption. It was found that the practice of indiscriminate hoop-net fishing was injurious to the production of fish, and the Department found it necessary to put a stop to it and regulate the fisheries by the appointment of a local guardian. The adoption of this measure has given excellent results.

PETERBOROUGH AND VICTORIA DIVISIONS.

HENRY CALCUTT, RICHARD WILSON, Overseers.

These adjoining counties extend for a great distance north, and include several lakes and other waters abounding in fish; these fish consist as well of spring breeding as of autumn breeding fish. Hitherto their protection has been somewhat neglected. There are also numerous mills in the central and northern parts of these counties, which require to be closely watched with regard to the prevention of mill rubbish, as well as to the building of proper and efficient fishways on the dams. Both of the present fishery overseers are not only inconveniently situated, but have proved inefficient. It has therefore become desirable to re-arrange these districts, so as to render more efficient the protection system. This will be attended to during the course of next season, so as to establish an efficient guardianship throughout a very important and hitherto neglected portion of lake country.

MISSISSIPPI RIVER AND LAKE DIVISION.

JAS. McFADDEN, Overseer.

The principal duties of this officer relate to protecting breeding fish in the spring, and preventing the throwing of sawdust and mill rubbish in streams. The latter part of this work is a most difficult one to achieve, and will only be ultimately accomplished by dint of energy and perseverance on the part of the Department, and a little good-will on the part of mill-owners.

MADAWASKA RIVER AND LAKE DES CHATS DIVISION.

JOHN LYON, Overseer.

This officer was appointed late in the season, and has hardly entered in the performance of his work. From previous repeated complaints of illegal fishing in this Division, it is expected that the appointment of a local fishery overseer on these waters will materially assist in enforcing a strict compliance with the various close seasons for fish.

RIDEAU LAKES DIVISION.

JNO. McGregor, Guardian.

The main duties of this officer consist in enforcing the various close seasons for fish, and compelling parties to fish according to law and the Departmental regulations. He was very successful in this end during last season, assisted as he was by the several lock-masters stationed on the Rideau Canal.

APPENDIX No. 13.

REPORT ON THE DEEP SEA FISHERIES OF PRINCE EDWARD ISLAND FOR 1874.

CUSTOM HOUSE, CHARLOTTETOWN, 5th February, 1875.

Hon. A. J. SMITH, Minister of Marine and Fisheries.

SIR.—I have the honor to send you herewith a tabular statement of the quality and value of fish exported from Prince Edward Island in 1874. I had no time to make up the figures myself, but I have checked them, and find them correct. Neither am I in a position to prepare a report on the subject worthy of your Department. I was absent when your telegram reached Charlottetown, and since my return I have been all but laid up after so much cold and fatigue. Your printed report for 1873 I have not yet received, and hence am unable to compare the last and previous year. I have glanced cursorily over the returns for 1872 as published in our local records-1873, for statistical comparison, not being reliable, as half the reports were under the "local" arrangement, and the other half under the Dominion, when no account was taken of shipments to Canada, Nova Scotia and New Brunswick—and find the quantity of mackerel exported in 1874 to be threefold that of 1872. For the latter year the total value of fish exported is \$128,777; for 1874 the sum is \$288,863. In cod fish I observe a falling off in the past year, as compared with 1872, of nearly 50 per cent., both in quantity and value. In the article of canned fish, on the other hand, there is an increase of nearly 30 per cent., which shows that this is a growing industry. During the past year there were engaged in it Harry S. McNutt, Esq., at Malpeque; Hon J. C. Pope, at Cascumpeque; Messrs. Matheson & Brown, at West Point; Hon. D. Davie and Mr. John Cairns, at Murray Harbor: Mr. Mathew Waddell, at Rollo Bay; Messrs. George Wilson & Co., at Rollo Bay; and Messrs. Shanks & Smith, at Little Sands and Rollo Bay.

In 1874, the catch of mackerel was the largest ever known in Prince Edward Island. The fish was inferior in quality, and mostly "shore caught." The proportion of number

ones was comparatively small.

The latest catch was, I am informed by Mr. Churchill, of Rustico, about equally divided into ones, twos and threes. In money value, however, the enormous quantity anade up for more than was lost in quality and price.

Oysters, of which there is a large quantity to be had in the Island waters, do not figure largely in the returns. They are shipped to, and consumed in, the Dominion, and

do not therefore appear on our books as an export.

The figures I send you show that the fisheries of this section of the Dominion proved highly successful in 1874.

I have the honor to be, Sir, Your obedient servant, (Signed,)

D. CURRIE.

QUANTITY and VALUE of Fish Caught and Exported from Prince Edward Island in the Year 1874:—

Year.	Article.	Quantity.	Value.
1874.	Mackerel. Herring. (Cod Fish, (salted). Salmon, (canned). Salmon, (pickled). Lobsters, (canned). Oysters, (fresh). Sea Fish, (not pickled). Other kinds Fish Oil	27,317 280 7,4134 4,978 104 1,443 146 181 32 2,805	\$221,761 00 4,963 00 29,018 00 9,389 00 114 60 10,592 00 256 00 7,157 00 4,300 00 1,310 00

Of the foregoing, there were shipped to

GREAT BRITAIN.

Year.	Article.	Quantity.	Value.
1874.	Cod Fish, (salted) Mackerel Mackerel All other kinds Salmon (canned). Lobsters, ,,	2,680 79 2 949 1,231	\$9,630 00 632 00 160 00 7,691 00 8,902 00

WEST INDIES,

Year.	Article.	Quantity.	Value.
>) >>	Cod Fish Mackerel Salmon, (canned) Other kinds Salmon, (pickled) Lobsters, (canned)	20 11	\$10,028 00 1,025 00 86 00 35 00 114 00 90 00

UNITED STATES.

Year.	Article.	Quantity.	Value.
1874.	Mackerel Herring. Cod Fish. All other than pickled. Salmon (canned) Lobsters, Fish Oil.	4,007 200	\$220,104 00 4,966 00 9,360 00 11,262 00 1,612 00 1,600 00 1,310 00
			\$250,214 00

\$288,863 00

·	NEWFOUNDLAND.		
Year.	Article.	Quantity.	Value.
1874.	Oysters	132 brls.	\$228 0
	ST. PIERRE.		
Year.	Article.	Quantity.	Value.
1874.	Oysters	14 brls.	\$28 0
	RECAPITULATION.		
	Places.	·	Value.
est Ind	tainies		\$ 27,015 0 11,378 0 250,214 0

APPENDIX No. 19.

SUGGESTIONS BY HON. T. P. HAWTHORNE, SENATOR, FOR THE IMPROVEMENT OF SALMON RIVERS IN PRINCE EDWARD ISLAND.

MARSHFIELD, PRINCE EDWARD ISLAND, September 30th, 1874.

Hon. A. J. Smith, Minister of Marine and Fisheries.

SIR,-

In the Session of 1869 the Legislature of Prince Edward Island passed the Act 32nd Victoria, Cap. 27, entitled, "An Act for the better protection of the Salmon Fisheries,

"and to repeal a certain Act therein mentioned."

In the same Session, the Appropriation Bill contained a vote of £100 currency, equal to \$321.44, wherewith to put the Act in operation, and in each succeeding Session, till that of the present year, a similar sum has been appropriated for this service; both the Act and the vote will be found marked in the accompanying copy of the Sessional Laws of 1869. In conformity with its provisions, Commissioners and Water Bailiffs have been appointed. The duty of the former has been chiefly to supervise and direct the water bailiffs, who are required to watch the streams for which they are appointed, and prosecute any persons found violating the Act. Vide Sec. IV and Schedule A.

In one of the four rivers named in the Act—Winter River—the experiment, for such it may be termed, has proved eminently successful. On the whole, it may be said that this river has been faithfully watched by about five water bailiffs, receiving salaries of

some \$20 each for the season.

Great numbers of salmon have spawned undisturbed during the last few years, and it is thought that the number of fish frequenting the harbor's mouth where the Winter

River debouches, has considerably increased.

The writer took an opportunity, before the setting in of last winter, to visit the spawning grounds in Winter River, in order to form an adequate opinion of the results arrived at. The spawning season, however, was then over, and the fish were lying in numbers in deep pools, waiting for a freshet to carry them down to salt water. Their work was apparent in many places, gravelly reaches, for a distance of several chains were burrowed up to form a suitable place of deposit for the spawn, which would vivify about the ensuing month of April or May. At these seasons the fish are an easy prey to poachers, and it is from September to February that the duties of the water bailiffs require to be diligently and taithfully performed.

As to the results obtained in the other rivers named in the statute—Dunk River, the Morell and Widgell—the writer cannot speak from personal observation, but he has communicated with Senator Montgomery respecting the results obtained in Dunk River. The Senator writes: "I do no think that river has been well attended to; it might be as "good for salmon as any river we have in the Island if well looked after." Respecting the Morell, a former Member of Parliament—James Hogan, Esq.—a reliable person, writes nearly to the same effect, and considers success certain if proper measures are

adopted.

It may be stated that the rivers of this Island are peculiarly well adapted for breeding salmon, the smallest brooks' are never dry, being fed by perennial springs, and the courses of the rivers being short, they are not subject to heavy freshets, which might disturb or carry off the spawn; moreover, the red sandstone gravel of the reaches frequented by the fish is soft, and easily burrowed up by them.

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If at any future time fish breeding should be attempted in a systematic way, unequalled facilities would be found for forming breeding ponds, at a very inconsiderable expense, by damming up the smaller streams. In one important respect the Act referred to requires amendment—the close time should be extended until February, instead of the first day of January.

Winter River and the other streams referred to are at present practically without protection, for though the Act 32 Victoria, Cap. 27, stands unrepealed, no funds have been voted to put it in operation. It would be a matter of much regret, particularly to those who have taken an interest in the protection of these valuable fisheries, should the results which have been attained by several years of watching be neutralized. Some temporary expedient therefore, seems to be required to meet the peculiar circumstances of the case. The writer presumes that very general powers are vested by the Dominion Fishery Laws in the Minister of Marine and Fisheries, and may be made applicable to this Province by Order in Council. If by virtue of those powers the rivers referred to could be treated as protected for breeding purposes, and the provisions of the Act 37th Victoria continued until a better and more efficient system could be devised and adopted, the object of protecting the spawning fish from their present danger would be accomplished.

Of course, with reference to the Dunk River and the Morell, it might be necessary to make some change in the personnel of the Commissioners and water bailiffs, or to require from the parties acting in those capacities a more active performance of their duties; but with regard to Winter River, the writer considers that the success which has been obtained is mainly due to the personal exertions and influence of Isaac Thompson, Esq., a gentleman who owns grist mills on that stream, and has acted as Commissioner from the passing of the Act till the present time. His advice as to the appointment of bailiffs, or on any point connected with the protection of salmon, may be adopted with confidence. His colleagues in the commission are John Scott McLeod, Esq., an active efficient man, and John Angus McDonald, Esq.; but neither of the two last named persons reside so conveniently near the spawning grounds as Mr. Thompson.

All of which is respectfully submitted by the undersigned.

THOMAS P. HAYTHORNE,

Senator.

APPENDIX No. 20.

REMARKS ON THE SALMON FISHERIES OF BRITISH COLUMBIA.

ROSEBANK, VICTORIA, BRITISH COLUMBIA, 12th December, 1874.

Hon. A. J. Smith, Minister of Marine and Fisheries.

Sir,—I have the honor to submit, for the consideration of the Government, the following notes and suggestion having reference to the improvement of the Salmon Fishery on Fraser River in this Province.

I have the honor to be, Sir, Your most obedient servant,

> ALEX. C. ANDERSON, J.P., British Columbia.

THE FISHERIES OF BRITISH COLUMBIA.

Extract from "Vancouver Island and British Columbia," by Matthew Macfie, F.R.G.

The seas, bays, and rivers of both these colonies teem with domestic resources of this description in endless variety.

Herrings, which make their appearance in our bays and harbours in March, may be mentioned first in order. On the coasts of Vancouver Island these fish are large and

admirably adapted to make bloaters.

Hoolukans ascend the streams in April in dense shoals. Their approach is indicated by the presence of sea gulls swooping down to devour them, and causing the banks of the river to echo with their screeching. This species are about the size of a small herring and are so fat as to baffle ordinary methods of cooking to prepare them for the table. Oil is pressed from them by the Indians on the coast, and disposed of to tribes in the interior. It possesses a medicinal value, and cannot fail to be useful where any hydrocarbonaceous food, such as cod liver oil, is prescribed. When dried, the hoolakan is often used by the natives as a torch, and when lighted it emits a brilliant light. The Indians catch this species of fish by impaling them on rows of nails at the end of a stick, about four feet long, and so thickly do they swarm, that every time this rude implement is waved in the water, two or three of them adhere to it.

The hookbill and silver or spring salmon are known to swim up a thousand miles from the mouth, battling successfully with the current, and pressing through swift canons, and over falls impelled by the natural instinct to propagate. But while many of them succeed in depositing their spawn at the head waters of great rivers, not a few are exhausted in the struggle and die. An officer in the service of the Hudson's Bay Company, who resided on the Columbia River (Oregon) for many years, states that on a sudden falling of the waters, the numbers of salmon left on the banks are so immense as to cause the river to stink for miles. The advent of the spring or silver salmon, which is the most valuable because the most wholesome, occurs about the end of March or the beginning of April, and in June it is caught in abundance. Its weight ranges from 4 to 72 lbs. The species which arrives between June and August is small and tender, averaging from 5 lbs. to 6 lbs. The third kind comes in August, and weighs 7lbs. The humpback species

appears every alternate year in August, and remains till winter. It is most suitably cured by drying and smoking. The hook-bill arrives in September, and is so called from having a bill like a parrot. It has small, sharp teeth. Its flesh is white, soft and flabby, and in the male is altogether unpalateable. Salmon is one of the chief sources of Indian The natives are active in hawking it in the white settlements, and for Is. one may, any day during the season, purchase what in the sparsely supplied markets of England would cost two or three pounds sterling. The prices current of Melbourne show the cost of imported salmon preserved in tins to be from 1s. 6d. to 1s. 8d. per lb. (wholesale). a large firm going into the business of catching and exporting salmon in our part of the world, the cost of the stock would simply be the labor of fishing. No house of importance has yet embarked in that lucrative enterprise. At certain times the canons (or gorges) of the rivers are so crowded with salmon that the navigation of canoes is virtually impeded. The Indians catch them with a pole, attached to one end of which is a transverse piece of wood. Into this are stuck tenpenny nails. Leaning over the gorge, they strike the nails into the fish, impaling one or two at each descent of the pole.

Trout are found in the waters of both colonies, and often weigh from 4 lbs. to 6 lbs. In the numerous lakes and streams of Vancouver Island, as well as in those of British Columbia, trout are to be met with of excellent flavor, and are caught in winter with the utmost ease. In Lake Okanagan they may be taken out with nets in wagon loads, and by wating in the water one may catch them with the hand without difficulty. A superior kind of trout abound in the lower Fraser, weighing 7 lbs. or 8 lbs., and another of a smaller description in the tributaries of that river. Mr. Brown states that twenty mountain trout were recently caught in a stream near Hope, whose aggregate weight was 146

lbs., and two of them weighed 11 lbs. each.

In regard to the sturgeon which is found in the rivers and lakes of British Columbia. the same gentleman informs us that it sometimes attains a weight of from 100 lbs. to 500 lbs. and upwards. From a female sturgeon killed in the Fraser River some time ago, a bushel of caviar was taken. From the swimming bladder of this fish, isinglass can be made, equal to that so extensively shipped from the Eastern States of America. This portion of the fish is also used for fining malt liquor. Caviar manufactured from its roe is a favorite dish in Southern Russia, and might be made an article of large export.

Halibut are caught in immense numbers round the entire coast, but especially off the Straits of Fuca. Their size is often enormous, and it is asserted by an officer of the Hudson's Bay Company that, in 48 hours' fishing, a vessel of 600 tons might be loaded

with them.

The Smelt, which enters the Fraser early in spring, may be captured in hundreds.

The haddock and whiting exist, and the dog-fish teems beyond conception. Dr. Forbes reports that as much as 2,000 gallons of oil have been obtained from this latter fish, in the season, by a very small tribe of Indians in Clayoquot Sound. Considerable quantities of dog-fish oil are exported annually by the Hudson's Bay Company.

A certain species of sea perch is found in abundance, often reaching from 60 lbs to

80 lbs in weight.

Rock, skate, bass, anchovy and flat-fish may be added to this list.

Shrimps and prawns, too, are extensively caught in the neighborhood of Victoria.

Cod banks are said to exist in Plumper's Pass, and close to the north end of the

Cod banks are said to exist in Plumper's Pass, and close to the north end of the Island.

A certain kind of seal is found at the mouth of Fraser River. In summer it is constantly to be met with drifting down with the current, seated on a log of wood. Another variety of this animal visits the coast of Vancouver Island, and is shot by the Indians who trade in seal-skins.

I have seen in the month of September whales innumerable sporting in the Gulf of Georgia, but the most valuable species are found in more southerly latitudes. Specimens of oil from the whale, seal, dog-fish and hoolakan, were sent from the Island to the Great Exhibition of 1862.

The "right whale" fishing ground in the North Pacific extends from lat. 30° N. The

"sperm" whaling ground lies between lat. 20° S. and lat. 20° N. From the latter point to our colony, whalers would have a safe and easy run, with the favoring influence of trade winds and an open sea.

The morse or walrus exists in denser profusion than in any part of the world, in the vicinity of the Alention Islands and Behring Straits. This is a branch of the Pacific fisheries that would prove very remunerative from the amount of ivory it is capable of yielding. These places could be reached in fourteen days' sail from Vanceuver Island.

The facilities possessed by both these colonies for catching and curing fish are proeminent. The indented character of their coasts signally adapts them to become important
in the exportation of this article. Port San Juan, Barelay Sound, Mantta, Hespod,
Koskeemo, Sooke, Esquimault, Victoria, Nanaimo and many other bays may be enumerated, including the inlets on the coast of British Columbia, 450 miles long, all convenient
to extensive fishing grounds, and peculiarly adapted for sheltered fishing stations.
The present rendezvous of North Pacific whalers is San Francisco and Honolulu,
because those following this occupation on our coasts are for the most part Americans.
But when the same British enterprise that has developed the fisheries of the North
Atlantic is introduced in this ocean, whaling fleets will make their headquarters in British
territory.

FISH OF BRITISH COLUMBIA.

"Whilst it would be tedious to undertake an elaborate or scientific description of the several species of fish caught upon the coast of British Columbia and Vancouver's Island, it may be proper to state that in these regions we possess an extraordinary variety and in great abundance. Sturgeon of enormous size are caught with the net, whilst salmon also are taken with the net and the spear. The hallibut, cod, bass, mackerel, perch, flounder, spat, sole, carp, herring and eels, in short, fish of almost all kinds, abound in incredible numbers; as do also crabs, oysters, clams, mussels, cockles, and other descriptions of shell fish. The salmon is really delicious, rich and well flavoured, equal to any we get in England, whilst beautiful spotted trout of several varieties and of excellent quality are plentiful in every brook and stream in the country, but they are shy of bait.

Will it be credited that up to the present moment, no organized attempt has been made to prosecute the fisheries of British Columbia further than for the immediate supply of the local market with the fresh article, except by the Hudson's Bay Company. It can scarcely be doubted, however, but several branches of the business might be prosecuted with very great advantage now and at once. Sardines also abound, and are fully equal in flavour and size to those imported in the well-known tins. The pursuit of those specimens of the finny tribe would also prove very lucrative. Truly the piscatory advantages of British Columbia are very great, and must one day command serious attention.

In July of each year the salmon immigrate to these regions in immense shoals, on their way to the rivers and streams of the country, which they escend to their most remote tributaries, and so numerous are they that I have frequently caught them by hand, or flung them out upon the bank of the stream with a walking stick. There are four varieties of the salmon which arrive in a definite rotation, but are not of the same quality, either for eating or salting. One kind, however, known as the humpbacked salmon, is really curious. It is an ugly specimen of the finny tribes, and its flesh is scarcely fit to eat, being soft and flabby. A most interesting and truthful account of the salmon which come to spawn in these regions appeared in an American newspaper some time ago.

Of course the object of the salmon in visiting the streams which traverse the wilds of British Columbia is the same as in this country, namely, to spawn; and the instinctive desire of these "humpbacked" fish to reach the upper waters is so strong that nothing can stop them. Onward they speed. The impetuous current is brested, rapids are past, cascades leaped, but still they press forward, wriggling through meandering streams too beant for swimming. Onward, onward, ever onward, while myriads are left upon the

strand, and die still struggling onwards. The fish are, upon entering the mouth of a river, in tolerably good order, but, after travelling up stream a few hundred miles, they become poor-poor indeed-and much injured. The skin broken and abraded, losses its brightness, often becomes a deep pink, and robbed of its silver scales; the head disfigured from blows and falls upon the rocks; the fins torn and divided, in their efforts to force through spots too shallow; the eyes, once bright, are now sunken and lustreless. of these poor salmon ever descend the river again, but having performed their natural duty, perish by instinctive suicide, striving onwards after they know not what. orphan fry descend to the blue sea in the following spring, and, it is supposed, do not return for four years, but where they spend their time is unknown. However, in due course they follow the track of their forefathers, searching after, they know not what, and meeting with a like fate. Thus we see that nature perpetrates and makes use of a race of suicides. But nature does dothing in vain. Were it not for this migration, British Columbia would have been uninhabited, because these fish form almost the Indians' only food during the long, dreary winter season. Thousands upon thousands are caught at the proper time, and dried, and stored away for future use. Salt is not used in this process. These salmon are much more abandant in some years than in others; indeed, it is said that every fourth year is a year of plenty, and the supply grows less annually until the fourth arrives again. It hardly needs to be mentioned that in years of scarcity the aborigines suffer great distress and privations; indeed, many die of absolute starvation.

It is really remarkable how little attention is paid by the Colonist to the curing of fish, when it is known that the Hudson's Bay Company salts annually about four thousand barrels of salmon, and finds a ready market for the produce at the Sandwich Islands and other places. Of late, however, that branch of business has not been so prosperous, as the fish appear to be less abundant; at least they are not caught in such large quantities as formerly. However, this salmonian immigration will, with the other fish which these waters have in so great plenty, together with furs and feathers, be a source of very considerable wealth and prosperity. To conduct operations profitably and properly requires a great deal of capital, but with this almost universal necessity there is a fair chance of success. It should, perhaps, be remarked that the most valuable salmon are taken from the middle of April to the end of July; that from June to August millions of these fish weighing about 8 lbs. ascend the rivers, and that then comes the large white

salmon." — (Macdonald's British Columbia.)

BRITISH COLUMBIA.

Notes and Suggestions regarding the Salmon Fisheries on Fraser River.

Up to a very recent date the fish were cured for exportation by salting in barrels. The demand in this condition was limited. Since then the expedient of preserving the fish in cans in a fresh and cooked condition, has been successfully adopted. This method was first introduced on this coast, on the Columbia River, Oregon, where a very important and constantly increasing business in this line has been established within the last few years. The exports of the canned salmon from Oregon to all parts of the world are very heavy indeed, but I have no data for estimating their amount. On Fraser River, however, the trade, though comparatively in its infancy, has already attained very considerable proportions, and is capable of great extension. The public prints estimate its value for the passed season variously at from \$200,000 to \$250,000; estimates which, though vaguely differing, are doubtless founded on substantial grounds. I question, however, whether a large proportion of the fish cured on Fraser River this year will compete favorably, especially in the London market, with the uniformly rich produce of the Columbia river fisheries; and it is with a view to remedy this disadvantage, with reference to a future period, that I respectfully submit a suggestion, which I trust will be judged practicable, and of importance sufficient to justify the necessary trouble and outlay.

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Several varieties of the salmon resort to Fraser River; but of these the chief are:

- 1. The Saw-gûae or Kase.
- 2. The Suck-Kai or Tâlo.

Of these two varieties the first is, perhaps, in no any respect inferior to the noble fish that form the staple product of the Columbia River. The second on the other hand, is both of size and quality, far less attractive. Of the first appearing theearlier in the season, a proportion of the fishery yield is composed; but the run of these superior fish is short, and the catch consequently limited. It is the second and inferior variety that affords the main supply. For some details, however, if required, regarding these several varieties, I respectfully refer to an essay on the resources of this Province which I had the honor of composing two years ago for the Provincial Government of which copies, I presume, have been lodged officially with the Department at Ottawa. For my present purpose it suffices to say that none of the first named variety enter the waters of the Thompson, a chief tributary of the Fraser which are frequented only by the smaller and inferior variety. I suggest, therefore, the introduction, at the proper season, to the head waters of the North and South Branches of the Thompson, of an adequate supply of the spawn of the large Columbian variety from the adjacent head waters of the Columbia River, whereby a greatly increased supply of superior fish would probably be ensured, and the prospective value of the fishery be immeasureably enhanced. Uniform experience in various parts of the world has shown how successfully the transplantation of the spawn, whether of salmon or other fish can be effected even under all the disadvantages of distance and difficulty of transport. Hence the confidence with which I venture to suggest the undertaking in question, where every facility exists, and where the object to be attained promises to be so important, prospectively, to the interests of this Province and of the Dominion.

ALEX. C. ANDERSON, J.P.

EXTRACT THE ANNUAL REPORT OF THE BRITISH COLUMBIA AGENT OF THE DEPARTMENT OF MARINE AND FISHERIES (JAMES COOPER, ESQ.), DATED AT VICTORIA, 31st OCTOBER, 1874.

The fisheries of British Columbia are assuming a type of importance, particularly with reference to the canning of fresh salmon. There are at present four establishments on the banks of the Fraser embarked in this branch of business and it is anticipated that not only will those at present established extend their operations, but other new firms will be prepared by next season to commence.

I append the statistics of fish exported from Fraser River, being last season's catch:

	Messrs.	Findlay, Durnam & Brodie.	
Cases fresh Bbls, salt			$7119 \\ 254$
		Messrs. Loggie & Co.	
Cases fresh	salmon		6500
Bbls. salt	do		1000
" bellies	do		100
	•	Vancouver Island Co.	
Cases fresh	salmon		3000
Bbls. salt	do	***** ***	120

Messrs. Holbrook & Cunningham.	
Cases fresh salmonBbls. salt do	2100 300 100
Mr. Frederick Kaye.	
Bbls. salt salmon	300
Other parties estimated at	500

A large number of persons are employed on various parts of the coast in the manufacture of dog-fish liver oil. The natives also bring to market, during the year, several thousand gallons in a crude state, sometimes of a very inferior quality; it all, however, finds a market.

Whale fishing, in the inland waters has been entirely given up, owing probably to the misfortunes of the original company, arising not so much from the scarcity of fish as from the want of proper appliances and the necessary capital to prosecute this enterprise with energy.

During the months of August, September, October and November the Gulf of Georgia appears to be alive with whales, of a smaller size than those generally seen in the ocean which yield from thirty to fifty barrels each.

JAMES COOPER.

APPENDIX No. 21.

REPORT ON THE FISHERIES OF MANITOBA.

LISGAR, LITTLE BRITAIN,
PROVINCE OF MANITOBA.
31st December, 1874.

Hon. A. J. Smith, Minister of Marine and Fisheries.

SIR,—Having been appointed Fishery Overseer for the Province of Manitoba I have been for some time expecting the introduction of the fishery laws into this Province, and instructions from your Department, but as these have not come to hand I feel bound in duty in the mean time, to give your Department a brief sketch of the fish and fisheries of this Province:—

1st. The sturgeon, of which, it is said, we have two kinds, (i.e.) acipenser ruperteainus, the Rupert's Land sturgeon, acipenser rubicundus, the ruddy sturgeon. This is the largest, and, considered by some people the best fish in the waters of this Province. I have taken individuals of the former species, that measured over six feet in length, and weighed over 130 pounds. The ruddy sturgeon, as a rule, are much smaller, rarely measuring over five feet, and weighing from 70 to 80 pounds. And here I may observe that the average weight of sturgeon, taken in Red River, is from 70 to 80 pounds. A fish of medium size has often yielded from three to four quarts of oil. Its sound or air bladder, simply dried, supplies the isinglass of commerce, and in former years, when exported to England, sold there for \$5.00 per pound. Forty years ago numbers of sturgeon were taken in nets during the winter months, in the south end of Lake Winnipeg and within the river mouth, and some years in every pool from the river mouth to Pembina, but winter sturgeon fishing has of late years become unprofitable or neglected. On the breaking up of the ice, which generally takes place in the month of April, the sturgeon enter the river for the purpose of spawning. At the time the colony commenced, and during the first thirty years of our colonial existence the number of sturgeon that came into the river was truly incredible, the number then taken in April, May and during part of June, was very great, and I feel grieved to say that according to the best information I could get, and from my own observation, one Sturgeon does not enter the Red River now for every hundred that came into it annually forty years ago.

2nd. The next fish in importance is the cat-fish, (the barbue of the French, silurus An ordinary cat-fish weighs from four to twelve pounds, it is rich and of excellent flavour, and enters the river in the month of June, not only for the purpose of spawning but in quest of food; they resort to the rapids and gravelly points of the river when they deposit their ova. And here permit me to observe that myriads of cat-fish spawn on elevated gravelly banks in Lake Winnipeg. Their toils ended, they reduce in condition; their voracity, which is great at all times, is increased; they leave the spawning grounds, resort to deeper water in the river, and come from the lake in great numbers, enter into the channels and lakelets in the marshes or fens on each side of the outlet of Red River into Lake Winnipeg, where they are followed by the Indians, in their light birch bark canoes, who on calm hot days spear these fish in hundreds during the months of June, July, and August. They are also taken in great numbers on hooks baited with fresh water lobsters, bits of fish or flesh. These hooks are attached to lines stretched across the river, lines are sometimes set in the lake for cat-fish, and great numbers taken. The Indians split the fish into thin flakes and dry them in the sun, after which they are packed up in bundles and reserved for future use. Great quantities of oil are extracted from the eat-fish, and highly relished by the Indians, who use it along with their dried

fish, but it is not much esteemed for lubricating machinery. This fish contributes largely to the support of our population during three months of the year. In September they begin to leave the river for the deep water of Lake Winnipeg, and finally, for the season disappear in October. To be able to form some estimate of the number taken annually in Red River, and in its tributaries, would be very interesting, but we have no reliable data to guide us in our inquiries, therefore we will content ourselves by saying that from 25,000 to 30,000 are annually taken in the waters of this Province, the average value, 25 cents each, giving a total of from six to seven thousand dollars, besides a large quantity of oil.

3rd. Hiodou Chrysopsis, the gold eye, is the most numerous of all the finny tribes that delight in our waters. This little fish is from ten to twelve inches in length, and weighs from sixteen to twenty ounces each, and, in an economic point of view, is not surpassed in value by any other kind of fish that frequents our rivers and inhabits our lakes. They are taken every day in great numbers from the beginning of May to the end of September, and in past times were caught in nets set under the ice during the winter months. Of late years they retreat to the lake where they pass the winter, and in the spring return to the rivers.

4th. The sun-fish, the mala shegane of the Indians, the sciacna richardsonie. This fish weighs from four to eight pounds; it is a good table fish, enters the river in the begining of June for the purpose of spawning, when great numbers are taken in nets, seines, and with hooks, but the sun-fish do not long continue in the river for they generally disappear by the middle of July. This fish has the power of producing a noise like the distant beating of a drum at some depth under water.

5th. We have two species of perch, (doré) the largest kind weighs from three to five pounds. The smaller kind may weigh something about two pounds, has bright yellow bars running from the dorsal ridge to the belly, this little fish is good eating, but few in number, therefore, of small account. The large perch is taken in all the waters of this Province. On the breaking up of the ice they ascend the rivers and streams falling into Lake Winnipeg, in incredible numbers. They spawn during the month of May, and are taken in considerable numbers during the period of open water. In the month of November they forsake the river and pass down to the lake. Before spawning, and during the winter months, the perch is considered excellent food, especially when fried.

6th. The pike (esox lucius) is the tyrant of all our rivers and lakes; some of them weigh from twenty to thirty pounds. The ordinary run of pike weigh from five to eight pounds, and a large pike is frequently taken with two fish in his stomach, each weighing from three to four pounds. The pike is not fished during the period of open water, but is greatly sought after by the Indians during the winter months, and more especially during the months of February and March, when every other resource fails, their sole dependence rests on the pike, which they angle in great numbers in the deep still water in the river near its outlet into the lake. And when our harvests have failed, numbers of our people have had to draw for their subsistence on the pike. So taking a correct view of the subject we must allow that the fish is a great boon to the people of this land.

7th. The grey sucking carp, catastomus hudsonius, the red sucking carp, catastomus fosterianus. These two species of carp are found in the waters of this Province, but not in very great numbers. They ascend the river in May, and spawn in June. A few of them are taken in nets set for other fish during the period of open water, and generally thrown to dogs and hogs, for no person, who is not destitute of every other kind of food, will eat carp.

8th. Methy (or marbot) gailus maculoses, is occasionally taken in our lakes and rivers, but very seldon used for food, for hungry, indeed, must a man be before he will feed on methy.

9th. The attichawmeg of the Cree Indian, the whitefish of the white man, coregonus albus. About the middle of September these most excellent fish begin to make for the shores of our great lake, some of them find their way by chance or by instinct into Red River; they resort to the rapids and elevated beaches in the river, where they commence

spawning from the 1st October to the 10th, which operation continues from a fortnight to three weeks. In former years these fish were numerous in the river, and, no doubt, some thousands have been taken. It appears that those who defined the limits of this Province did not feel disposed to include much lake area within the above boundaries. Notwithstanding that, our fishermen, since the transfer, go to their old fishing grounds a fer miles north of the north-east corner of the Province, and I entreat your indulgence while I endeavour to relate what they and others have been in the habit of doing there. In the latter end of September numbers of fishermen leave Red River for Lake Winnipeg. some in birch canoes, others in skiffs, all endeavour to get where they intend to fish by the sixth, or at the very latest by the tenth of October. A few of them try their fortune within the Province, others pass to the south-east corner of the Lake; part of them remain on Elk Island, the rest pitch their tents round the bay, into which the River Winnipeg empties its waters, some proceed as far north as Blackwater River. The fishermen endeavour to be at the scene of their operations before the fish come to the shore, which is generally from the first to the tenth of October. The spawning continues generally two or three weeks, but this depends greatly on the state of the weather, when mild and calm the fish continue the full period of three weeks in shallow water, and great numbers are taken, but when the weather proves cold and stormy the fish leave the shore and retire to deep water; in such seasons the take is small. The whitefish in Lake Winnipeg average four pounds each, the fish is rather soft, but fat and well flavoured. 5,000 may be taken as the average yearly catch of this valuable fish in that portion of our great lake which is within this Province, and we may safely admit that the numbers taken annually near the mouth of Red and Winnipeg Rivers do not fall short of from seventy to eighty thousand; these sell when taken at sixteen shillings sterling per hundred, and when retailed in the settlement fetch twelve cents each.

Having given a brief sketch of the fish and fisheries in Red and Assiniboine Rivers, and in a small portion of Lake Winnipeg, I shall attempt a brief account of the fish and fisheries in that portion of Lake Manitoba which is within this Province. The most important fish in this lake are the attichawneg, (whitefish) these are taken in some places in the lake in all seasons. In the first week of October what is termed "the fall fishing" begins; score of Red River inhabitants lash their canoes or skiffs on carts, and trudge over the intervening plains to Manitoba Lake for the purpose of taking whitefish. The whitefish in Manitoba Lake are finer but smaller than those of Lake Winnipeg; their average weight is about three pounds each. They are, at the season of which we are speaking, preserved in a peculiar but simple manner; a frame-work is erected, and on its top stretchers or bearers are laid three feet apart. Small rods are next provided. are thrown on to the beach a hole is cut in their tail. And these small rods are now put in use, ten fish are threaded on each rod, thus forming what is called a spit, the cuds of which is placed on two bearers. The fish now hanging head downwards have their throats cut with a slash of a knife to allow the blood and water to escape freely. sharp frosty nights in the end of October harden the fish and preserve them. Here I must observe that in addition to those who go from this settlement to fish, two villages of French half-breeds and some Indians, have risen during the last fifty years on the east side of Manitoba Lake; these people prosecute the fall fishing to the full extent of their ability, as they have with few exceptions to depend on the fall fishery for their winter subsistence. And I believe when I say that about 20,000 whitefish are annually taken in Lake Manitoba within this Province, that I do not exaggerate. A few cat-fish have been taken occasionally in Lake Manitoba, but they do not seem to be plentiful. The gold eyes are very plentiful and taken in the creeks and ponds, in the marshes fringing the lake in great numbers during the period of open water; they appear to be somewhat larger than in Red River. Pike are numerous in this lake, and some of them of large size, they are angled during the spring months in great numbers by Indians and half-breeds, so much so, that this fish may be said to be the staff of life to these people for three months of the year. Perch are also taken in Lake Manitoba, they appear to be of the same kind as the perch of Lake Winnipeg. Suckers also abound in this lake, but there is neither sturgeon nor trout in its waters. In a former part of this report I have taken notice of the abundance of sturgeon, and other fishes that enter this river annually for some years after the commencement of the colony, and observed how their numbers have gradually diminished during the last forty years. There must have been some cause to produce the abovementioned change, and I shall endeavour briefly to point out some of them

1st. The inhabitants have hitherto been planted on the banks of the Red and Assiniboine Rivers, and as no man ever thought of manuring his fields, many of the inhabitants built their cattle houses on the banks of our rivers and streams, always threw the contents of their stables and byres on the rivers or at the foot of the bank, where they depended on the spring floods for carrying it down to Lake Winnipeg, others built on the slopes immediately above the river bank, and every heavy shower of rain washes or carries into the river the deleterious and ink-like contents of these huge middens.

2nd. Most of the settlers have been, and are still in the habit of tanning the hides of the cattle they kill for winter beef. This operation is commenced by immersing the hides in the river to soften; when sufficiently soft they are taken out of the river, spread on the beach, liberally sprinkled with lime on the flesh side, rolled into a lump, bound with a rope and consigned to the river a second time, where they are kept until the hair is easily got off. After the hair has been removed the hides are a third time put into the river, where they are kept for several days until the current washes out the lime. The ooze from the tanning tubes also finds its way into the river.

3rd. Saw-mills of late years have been erected near the river, these people, as a rule, have to live on fish at all seasons, they stretch their nets and lines across the river, which I believe must obstruct the progress of the fish up the river, and may be the means of turning the greatest part of them back to the lake. And we may credit this Indian population with their full share of filth added to the water.

I have the honor to be,
Your obedient servant,
D. GUNN, SENR.,
Fishery Overseer, Manitoba.

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APPENDIX No. 22.

REPORT OF SAMUEL WILMOT, ESQ., ON THE SEVERAL GOVERNMENT FISH BREEDING ESTABLISHMENTS IN ONTARIO, QUEBEC AND NEW BRUNSWICK, FOR THE SEASON OF 1874.

NEWCASTLE, Ont., February 3rd, 1875.

The Honorable A. J. Smith,
Minister of Marine and Fisheries,
Ottawa.

Sin,—I beg to enclose herewith a report covering a brief description of an inspection made by me during last summer of the several fish-breeding establishments erected in the Dominion under my supervision, and by instruction from your Department. There will also be found in the report a condensed statement of the transactions carried on at each salmon breeding house during last autumn, as well as an account of the present appearance and condition of the supplies of ova which were deposited in the breeding boxes at each establishment.

I have the honor to be, Sir,
Your obedient servant.

Sameul Wilmor, Fishery Officer.

There are at the present time five salmon-breeding establishments within the Dominion, all of which have been constructed through the instrumentality of your Department. Four of these are in full and satisfactory working operations; the fifth is also completed, but from unavoidable causes it will not be able to produce such satisfactory results as the others during this season.

The salmon breeding works above mentioned are located at points very distant from each other, namely: The first or original structure (the successful experiments at which have caused the others to be built) is situated at Newcastle, in the Province of Ontario. The second is on the Restigouche River, between the Provinces of Quebec and New Brunswick. The third is on the Miramichi River in New Brunswick. The fourth at Gaspé.

and the fifth at Tadousac, in the Province of Quebec.

In accordance with instructions from your Department I proceeded in July last to make an examination of the premises and inspect the works at the places above mentioned in the Maritime Provinces, with a view to having them fully completed and supplied with all the necessary apparatus for successfully carrying on the propagation of salmon by artificial means, during the season of 1874. I shall, therefore, have to speak of the state in which I found the premises and buildings at that time, and also report the position they now occupy, and the success which has attended the operations of each of them up to the present time. It will be quite impossible for me to make all of the statements with such particularity as I would desire, as four of the places where these establishments are built, are situated at very remote distances from my headquarters here at Newcastle. I have, however, obtained such information from the persons in charge of the several places as will enable me to give you a sufficiently lucid description of them, and also such an account of the transactions at each station as I trust will meet with the approbation of yourself and the Government.

Difficulties of more than an ordinary nature, it will be readily understood, must necessarily have to be encountered in the construction of these fish breeding establishment.

as many of them are unavoidably situated in localities where easy access cannot be had to them at all seasons of the year, and where labor and material are both difficult to be obtained. In addition to the above still greater trials had to be overcome during the past season in getting a staff of skilled assistants to take charge of and operate at these outlying points. The work of securing, catching and manipulating large parent salmon, and the art of properly impregnating the eggs, require from the operator not only a certain amount of intelligence, but also a great deal of practical ingenuity. Acquirements of this kind are rarely found in the employment of novices; time and practice are indispensibly necessary to educate persons for the work, and skill and experience are essential qualifications in an operation to warrant success in the spawning of fish, and in the impregnating and after management of the eggs.

With these few preliminary remarks I will give a brief statement of the position and

progress of each establishment, taking them seriatim, commencing at

Tadousac.

In the early part of the season I received instructions from your Department to commence the building of a fish breeding establishment at Tadousac, upon the site already selected there for that purpose, and to push the work in order that breeding operations might be begun during the season of 1874. In accordance with these instructions I proceeded to Quebec in the beginning of July last, where I sought information from builders and contractors concerning the probable cost of erecting such a building, and the time in which it could be fully completed. I then went down to Tadousac, where I was joined by your Commissioner of Fisheries, and after consultation together, it was considered most advisable to purchase a building if possible, already erected on the spot. By this means it was found that the establishment could be more expeditiously and economically built, than would be the case by letting the contract to a builder in Quebec. A report of this transaction having been already made to your Department by your Commissioner, it will be unnecessary to dwell upon it here. The building (formerly used as a mill) and the site in connection therewith being secured, arrangements were made to push the work of completion as rapidly as possible. A dam had been previously built across the outlet of a small cove, alongside the mill, in which it was intended to place the parent salmon after taking them from the nets, and to impound them there until the spawning season in October.

The Tadousac works were all completed by the middle of October, and a number of salmon had also been secured in the pond, when information reached me that an unforeseen accident had taken place by the breakage of a small portion of the net work on the dam, which left an opening by which the parent salmon had escaped. This loss of spawning fish necessitated an attempt to take others far up the river; the lateness of the season then prevented a satisfactory result, as the fish that were taken with the nets on the spawning grounds had, with but a few exceptions, all laid their eggs. From this fact, and from the unfortunate breakage at Tadousac, it was found impossible to secure a sufficient stock of parent fish from which to procure eggs to supply the breeding house; some few thousands, however, were obtained and laid down in the troughs of the establishment, and these, from the accounts which I have just received from the guardian in charge, are in a fair condition and doing well. This man, though willing and faithful, is inexperienced, and but for the cordial assistance and intelligent aid of Jos. Radford, Esq., of Tadousac, we must have felt great anxiety. I also mention the great personal help received from Senator Price, through whose exertions the few salmon eggs secured were ultimately saved.

The fish breeding works at Tadousac are of a substantial nature. The building is of strong durable construction, and is capable of accommodating upon the area of its two floors from two to three millions of salmon eggs, and I have no doubt from the experience already gained there by all parties during the past season, that next year fully three millions of young salmon may be hatched out there and distributed in the upper waters

of the Saguenay.

Gaspé.

Arriving at Gaspé Basin towards the latter end of the month of July, I inspected the works which had been commenced during the previous year of 1873. breeding establishment is erected upon a small brook some two and a half miles up the Dartmouth River. The building is very substantially built, well finished, and furnished with the necessary appliances to accomodate fully two millions of salmon ova; with some slight improvements a still larger number of eggs could be laid down with safety within its walls. At the present time there are 200,000 salmon eggs in the hatching troughs of the Gaspé breeding hause. They are reported to me by P. Vibert, Esq., the fishery officer in charge to be in a very favorable state, and it is confidently expected that nearly the whole of these will become living fry during the approaching spring season of 1875, and will be fit for distribution into such of the rivers of the Gaspé District as may be considered most desirable to plant them. The quantity of ova laid down at Gaspé is far short of what I had anticipated. It was expected that fully one million, or even more would have been secured. The cause of the reduced number of eggs in the establishment, was brought about by the refusal of the lessees of the adjoining rivers to allow salmon to be taken during the summer months, or in fact at any time. Provision will therefore have to be made in the future by which an annual supply of spawning fish can be had, from which the requisite number of ova may be obtained to fully stock the hatching troughs of the Gaspé breeding house.

Restigouche.

I reached these works in the month of August and found them completed and in readiness for the then coming season. Some few suggestions in the way of improvements were noted, such as extending the reception house, and increasing the size of the pond; these additions will add very much to the convenience of the establishment. The Restigouche breeding house is under the control of John Mowat, Esq., the fishery officer of that division. I found him a very efficient and painstaking person; under his management, and with the practical experience which he has now obtained, this institution will become a great success. The building, with its appliances inside, and the dam and surroundings, are all substantially and durably built. The outward appearance of the works is plain but sightly, the interior arrangements are convenient and comfortable in the extreme, The breeding and hatching apparatus are well adapted and systematically arranged, and the whole establishment has the unmistakeable appearance of being well calculated for the work of artificial salmon breeding.

Some 880,000 salmon eggs were taken in October last by Mr. Mowat, and laid on the hatching trays, and it is reported to me at the present time that nearly the whole of these have proved fruitful; their appearance must, therefore, indicate that a very large crop of young salmon will be let loose from this place next spring, to be distributed into many of the rivers emptying into the Bay des Chaleurs. From 110 female salmon the above mentioned large number of eggs were taken. These would show an average of 8,000 ova from each fish, and it will also prove the reputed high standard in size of the Restigouche salmon, for by the best authorities it is now calculated that about 500 eggs may be relied upon for each pound of flesh of the parent fish, the average weight therefore,

of the 110 salmon above described would be 16 lbs, each.

Much difficulty was experienced in the taking of spawning salmon on the Restigouche last autumn; the river being very large and swift in current, it was found troublesome to catch them within reasonable limits, at the time at which they were wanted. But the lowness of the water last autumn modified the work of taking the fish very materially. If the ordinary high waters of the fall months had prevailed, still greater difficulties would have had to be contended with, and might have prevented the possibility of obtaining the necessary supply of salmon wherewith to stock the breeding house with eggs.

Some means will have to be provided during next season, by which the difficulty referred to may be overcome; the plan to be adopted will be to form some strong and 5—12

permanently constructed ponds or enclosures at a convenient point on the river, where, near by, the salmon during their migration up river in the summer months can be taken in nets, and thence placed in these enclosures, and there safely kept until the spawning season arrives in the month of October.

Miramichi.

After inspecting the works on the Restigouche, I proceeded to the Miramichi River to perform a similar duty there. At this point is situated the most extensive and important works for artificial salmon breeding yet constructed in the Dominion. The buildings here are larger and more expensively built than at the other points mentioned. The main edifice is two stories high, the lower floor is used for fish-hatching, the upper one is fitted up for the residence of the officer in charge, and his family. outside of the structure has both a commanding and architectural appearance; the internal arrangements combine convenience, comfort and adaptability to the special work for which it was intended, and the upper portion comprises all of the requisites for a warm and comfortable dwelling house. The reception house outside, and the ponds for safely keeping parent salmon, have proved to be satisfactory in every way for their special requirements. The Miramichi establishment is under the control and supervision of Mr. A. B. Wilmot. His time and efforts, however, during this season have not been wholly given to this place, having been ordered to Gaspé to complete and put the establishment there in working order. Mr. Wilmot's stay at Gaspé necessitated my sending an assistant from Ontario, to perform the work of manipulating the fish and laying down the eggs at Miramichi, this duty was therefore carried out by the assistant as follows:

There were captured up the Miramichi River with nets 350 salmon; these were carried down stream some thirteen miles in a scow fitted up for the purpose, and placed in the reception pond alongside of the breeding house. Of this number 300 were manipulated, the remaining 50 either escaped from the pond or were left hidden in the deeper waters of it; of the 300 that were spawned, 200 were females, from which were taken 1,500,000 eggs, being an average of 7,500 from each fish. The first lot of ova was gathered on the 20th October, the last on the 15th November, when the seasoned closed. The latest accounts received from Miramichi state that the eggs are in a very healthy condition, and that a very high per centage of young salmon will be reared from them.

NEWCASTLE, ONTARIO.

Distribution of Fry of 1873.

At the close of my report on the transactions at Newcastle during 1873, it was mentioned that there were then in the breeding-troughs upwards of 300,000 salmon eggs, and also a very large number of salmon trout ova, all of which were then in a healthy and prosperous condition. As reference is made to that supply, I will here mention the disposal which was made of them.

Nearly the whole of the ova of the salmon, and of the salmon trout, were successfully hatched out; the fry of the latter were let loose into the stream, and into Lake Ontario, and the young of the former were distributed in numerous rivers and creeks in the Province of Ontario. The same course that was pursued in the distribution of the young salmon in former years, was repeated during last spring, namely, that of planting them (at the time when the umbilical sac had become nearly absorbed) in such waters as were considered best adapted for their after growth. The following rivers and creeks were selected for this purpose. Commencing at the point farthest east, the Moira and Trent Rivers had a goodly supply placed in each of them, as had also the Grafton Creek, Barber's Creek, Duffin's Creek, and the Rouge and Credit Rivers. There were also some distributions made by Mr. Kerr, the fishery officer at Hamilton, in other waters to the westward of the Credit River. The work of transporting and planting the young fish was in each case safely and satisfactorily carried out.

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The experiment undertaken in previous years of putting salmon fry into the waters of the Salmon River, a tributary of the Ottawa, some forty miles below the Capital, was again successfully performed, as was also that of putting several thousands in the Saugeen River in Western Ontario, with a view to acclimatizing these fish to the fresh waters of Lake Huron and others of the great inland seas of the West. The remainder of the crop of last season's hatching was let loose into Wilmot's Creek, several of the most eligible spots in the stream having been selected for the purpose.

Condition of Buildings.

It will be necessary for me to refer to the buildings and other works forming the Newcastle establishment, in like manner as I have done for those which are situated in the Provinces of Quebec and New Brunswick. In relation to this subject I have to state that although this institution has proved to be most satisfactory as regards the numbers of young fish in it, and in the arrangements of the appliances and apparatus for the artificial propagation of fish, yet it is at present found quite inadequate to carry on successfully the larger and more intricate experiments, which are essentially necessary to more fully develope the science of fish culture, as an industrial enterprise, the utility of which is now being fully recognized by the people of this Dominion, and of the adjoining Republic of the United States. The first construction of the establishment here was wholly of an experimental nature, and altogether novel in the modus operandi adopted and in the appliances used for artificial fish breeding; in it has been inaugurated the science of tish culture in Canada and the efficacy of the artificial methods of propagating the commercial fishes of the country. It has also been the nucleus from which all of the national and state fish breeding establishments in Canada and the United States of America have taken their rise, therefore, the status of this institution should be maintained in order to still further advance its usefulness. The buildings require to be enlarged in size and improved in design, their capacity at the present time being found to be quite too limited. It is also found from the increased numbers of salmon which entered the creek here last autumn that more extended limits are required for their natural reproduction, and for their greater freedom. It it highly requisite also, that the buildings, ponds and other works should be thoroughly inclosed with some description of strong permanent fencing; this would prevent a certain amount of poaching now carried on, and would aid very materially to the guardianship of the stream and premises during the spawning season of salmon.

Increase of Salmon in Wilmot's Creek in 1874.

It has been observed that a steady annual increased number of salmon have entered this stream for the past few years; the numbers which came up the creek during the past spawning season in October and November were wonderfully in advance of any former year, this was the more remarkable on account of the extreme lowness of the water. In some portions of the stream where the shallows prevailed, it was found almost impossible for the larger sized salmon to ascend; nearly all of these were compelled to lay their eggs in the open water some distance below the reception house, only the smaller sized salmon were enabled to reach this buildin; and enter it. Of these smaller fish upwards of 800 entered the house, and for an illustration of their movements, a quotation from the register of entrances for six nights will be given. This showed that 605 salmon had during that time taken up their lodgings within the building, namely:—

October	22nd	45
"	23rd	73
66	24th	68
66	25th	66
44	26th	141
"	27th	212

This last tally of the 27th would have been increased to 264 were it not for a small opening which 52 of the more knowing ones had discovered in the main barrier, and

through which they passed up stream where they were found next day.

The finest and largest and by far the greatest number of spawning fish did not reach the reception house at all; these laid their eggs in the bed of the creek in the natural way; this circumstance is to be regretted as vast numbers of the ova deposited in this way must certainly perish. The rush of salmon up stream for spawning purposes took place within the limit of only a few days, and having but one assistant to perform the whole work of spawning (the others having been despatched to Tadousac and Miramichi) gave neither time nor opportunity to operate upon the larger fish in the open stream, until too late, when it was found they had dropped the whole of their eggs; all of the available time and attention having been occupied in manipulating the large number of smaller fish that had entered the reception house.

From the salmon that entered the buildings, some 800,000 eggs were taken; these were laid on the zinc trays, previously varnished and then placed in the hatching troughs, where they have since been continually cared for. At the present time the greater portion of these eggs are in a healthy state, and bid fair to produce a large crop of fry the embryo fish being now easily noticed in most of them. There are also on hand at present a large number of white fish ova, which were procured in the month of November

last, near Sandwich on the Detroit River.

California Salmon.

Through the kindness of Professor Baird, United States Commissioner of Fisheries, some 20,000 of California salmon eggs were sent to this establishment in October last. They were collected under the superintendence of Mr. Livingstone Stone, Deputy Commissioner, upon the Nosead River, a tributary of the Sacramento on the Pacific coast; they were transmitted across the continent by railway express, packed between layers of damp moss in wooden boxes. The ova arrived here in a semi-hatched state in the best possible condition; only 300 of the whole number were found dead at unpacking.

In the early part of December these eggs hatched out; they have not grown much since, but are doing well. The absorption of the sac progresses very slowly, and will not, I think, wholly disappear sooner than the sac of fry hatched out in April next. Both the eggs and the fry are deeper in color and larger in size than those of the Atlantic salmon. Several millions of these California salmon fry are being distributed by orders of Professor Baird in many of the Eastern States of America; how far the introduction of this new fish into the waters of this side of the continent may prove beneficial is at present wholly problematical.

In a recapitulation of the past season's operations in the procuring of salmon eggs at this place, and at the other establishments in the Provinces of Quebec and New Bruns-

wick, the results may be summarized as follows:--

At Tadousac	60,000
" Gaspé	
" Restigouche	880,000
" Miramichi	1.500,000
" Newcastle	

Total of salmon eggs...... 3,440,000

From the above quantity of ova which were laid down at the several places mentioned, it may be safely reckoned that fully three millions of salmon fry will be distributed in several of the rivers and streams of New Brunswick, Quebec and Ontario.

The fish breeding works in the lower Provinces having been for the first time this season put into working order, it may be safely anticipated that the proceeds of fish obtainable from each of them in 1875 will more than double the operations of 1874.

I have the honor to be, Sir,

Your obedient servant,

APPENDIX No. 23.

SPECIAL REPORT ON THE RESTIGOUCHE FISH-BREEDING ESTABLISH-MENT FOR THE YEAR ENDING 31st DECEMBER, 1874.

DEE SIDE, MATAPEDIA, Dec. 31st, 1874.

To Hon. A. J. Smith, Minister of Marine and Fisheries.

Sir,-I have the honor to report that, so far as I can judge at present, the establishment under my charge presents a most promising appearance. The hatching of young fish is so much advanced that they can plainly be seen in the egg, and although some small loss may still occur before maturity, I have no doubt the most critical period is passed, and that unless unforeseen circumstances occur, (which I shall try to guard against) a very fine and numerous lot of young fish will be ready for distribution next spring. From one hundred and ten female salmon I procured 880,000 eggs, being an average of 8,000 per fish; the largest quantity obtained from a single fish was 21,000. As many of the fish were taken on the beds and had already partially spawned, I am unable to give a correct average, but from 30 fish which matured in ponds I received 360,000 eggs, or 1,200 per fish; many of these were over twenty pounds weight. this quantity (880,000 eggs) I have lost 38,000; and from the small loss experienced during the last two weeks, I am in hopes the total loss will not exceed 50,000, leaving the full number of 830,000 young fry for distribution. I may mention that male fish were in excess of the female this year as two to one; exactly the reverse of last year. did not take any parent fish until the 12th September; between that date and the 19th of the same month, I captured at a distance of about seven miles above the breeding house 200 fish which were conveyed to the ponds in water tight boxes in a scow. Owing to the rapid current and rough bottom where the fish lay, they had to be taken by means of gill nets, it being found impossible to work the seine. Consequently many of the fish, especially the females which were heavy with spawn were much injured. Of the above mentioned number 130 were males and 70 females. Thirty males were allowed to escape, 10 females and 2 males died before reaching the pond, and no less than 30 females and 8 males died before maturity; the balance seemingly remained in good health, maturing well-although later than the fish in the river-and were liberated after spawning.

On the 12th October, whilst watching the river closely, I found salmon coming on the bars and commencing to bed in the gravel. I then constructed four makeshift reception houses or corralls at different places in the river, catching the fish at night and placing them in the enclosures until ready for stripping. From the 12th to the 20th I took 80 females and 120 males, all giving ova, although towards the latter period they were partly spawned. None were taken after the 20th with ova, the fish seeming to have finished spawning in eight days; out of this number three fish died probably from injury in catching. The fish in the ponds began giving ova on the 22nd October and finished on the 28th. I do not see any difference in the two lots of eggs, if any, it is in favor of

the pond fish, there being less dead eggs amongst them.

The state of the river was very tavorable for capturing the spawning salmon this fall, but as heavy freshets are a rule at this season, and that dependence could not be placed in securing a sufficient quantity of parent fish, I intend to obviate such difficulty in future by the following means:—

1st. To prevent loss of parent fish by gilling I shall procure a small mesh net, to be set with pounds, near the breeding house after the 20th day of August, in order that the fish may be taken before they reach the gravelled stage without injury.

2nd. By constructing another pond about thirty feet above the present reception house, sufficient to contain 100 salmon, with a sluice gate to dry the pond at will and give command of water.

Owing to the want of water last season, the fish in the ponds could not be induced to enter the reception house and had to be taken with a seine. I may here state that Mr. Wilmot has already pointed out these measures as necessary to success; he, after a most careful examination, being unable to place the establishments where the salmon could be made to enter it from the river. I complied with Mr. Wilmot's orders by placing a portion ova on gravel, but cannot detect any difference between ova to placed and that on varnished of the trays.

Owing to the large quantity of young fry, which I hope to have for distribution, more vessels will be required. I used a common five gallon tin kettle with a smaller one inside, perforated, to convey 4,000 fry to River Jacquet last spring, a distance of sixty

miles by horse and waggon, and without any loss.

I beg to recommend to your notice the following rivers as favorable for restocking, to wit:—Little River and Nouvelle River on the north side of Baie des Chaleurs, these rivers having their sources in the height of land between the Bay and the St. Lawrence with clear water and no settlements at their sources. Assistance might also be given to Bonaventure River, although the distance from here is considerable. No river exists in New Brunswick worth placing fry in, except the Jacquet, and it must receive better protection than hitherto to be ever of value, either for sport or as a means of furthering the interests of the fisheries on the Bay shore.

I have the honor to be, Sir,
Your obedient servant,
John Mowat.
Fishery Officer in charge.

APPENDIX No. 24.

SPECIAL REPORT ON THE MIRAMICHI AND GASPE FISH BREEDING ESTABLISHMENTS, FOR THE YEAR ENDING 31st DECEMBER, 1874.

MIRAMIOHI, December 31st, 1874.

To Honorable A. J. SMITH,

Minister of Marine and Fisheries.

SIR.—I have the honor to submit the following report of my operations at the

Miramichi and Gaspé fish breeding establishments during the past season.

I beg to state that, although not personally in charge at Miramichi during the spawning season, the efforts of my employes resulted in a success quite beyond my most sanguine expectations. The total number of salmon captured was 315, from which about 1.500,000 eggs were obtained. Mr. Parker, who conducted the operation of collecting the spawn, reports the fish as unusually large, some yielding as many as 15,000 eggs.

To prevent a renewal of the loss sustained last winter in the poisoning of eggs by the zinc covering of hatching grills, I ordered fine gravel to be lain on this covering to the depth of half an inch and the ova to be evenly distributed over the surface. This will, I hope, prevent the eggs coming in contact with the zinc and save them from its injurious This arrangement appears to have so far acted beneficially, as Mr. Parker states he never saw eggs doing better, and the loss up to the present time is unusually small. The establishment being now fully completed and in first class condition, I apprehend no difficulty for the future, and with the introduction of new hatching frames, I hope being enabled to make it as successful as any on this continent.

I have not met at Gaspé with the same success as at Miramichi. Although every mode that I could devise was used to procure a full supply of parent fish, I caught only 10 salmon in the Dartmouth River, 35 in the Malbay and 46 in the York River, making in all 91 fish. Of this number I found that not more than 30 were females, and from these I obtained only 20,000 eggs. These were placed on the hatching frames in the same manner as at Miramichi. A considerable number were injured in transporting them from the several ponds to the hatching house, those coming from the most remote ponds receiving the greatest injury. One lot of 60,000 eggs which were fecundated at Malbaie and left in Mr. Vibert's charge to be taken around the coast to Gaspé, I found, on my return from Miramichi, very much injured, over fifty per cent. showing signs of death a week after being placed on the hatching frames. The remainder of the eggs in the house are doing as well as can be expected under the circumstances, and I hope a good proportion of them will be brought to life. The building is fully completed and in first-class order, and all that is required to ensure success in future is a better arrangement for catching and retaining a full supply of the parent fish,

I have the honor to be, Sir,

Your most obedient servant.

A. B. WILMOT. Fishery Officer in charge.

APPENDIX No. 25,

SPECIAL REPORT ON THE FISH BREEDING OPERATIONS CARRIED ON AT MOISIE RIVER IN 1874, BY THE LESSEE, JOHN HOLLIDAY, Esq.

QUEBEC, 31st December, 1875.

Hon. A. J. SMITH,
Minister of Marine and Fisheries.

Sir,—The Departmental Report of 1873 brought my operations in fish breeding at Moisie to November of that year. The two men I left in charge of the establishment in the winter of 1873-1874 were Scotchmen who never wintered in this country. Though fully instructed beforehand, they did not make sufficient provision to keep out the cold, and the water froze in the rills when they cut out the ice with an axe and destroyed a great bulk of the eggs. However, in the summer about 580 young fish were put above the dam.

Last fall I sent two Lorette Indians to go up the Moisie with Mr. Fraser, who is in charge of the Post; these with two additional men completed the party. dependent on the steamer Margaretta Stevenson to get down the Indians, they were a few days later in starting from Quebec than we would have wished. They left the mouth of They left the mouth of the Moisie on Tuesday the 20th October and reached the head of the rapids the same day; next day at 4 p.m. arrived at the spawning ground in time to camp, the weather being fine but cold. On the morning of the 22nd, they commenced seining and secured three females, partly spawned, and eight males. On the following day, 23rd, they went higher up the north-east branch and after a good deal of seining took three females, partly The spawning beds shewed that a great number had already spawned, and nine males. spawned. If the expedition had started a week earlier they would have obtained as many They estimated that they had got 60,000 eggs, and as the salmon eggs as they desired. seemed to have left for the deep pools, they thought better to make sure of what eggs they had and therefore on Friday afternoon they left, on their return making the Long Portage on Saturday. They deposited the eggs in this establishment on that afternoon It had all been refitted and improved in the summer of 1874. After leaving particular instructions with the keeper the party went down to the Post.

The man in charge of the Post reports he has been up to the fish breeding establish-

ment and that everything there is in good order and doing well.

I have the honor to be, Sir,

Your obedient servant,

JOHN HOLLIDAY.

APPENDIX No. 26.

SPECIAL REPORT ON RIVER OUELLE.

NEWCASTLE, ONT., October 14th, 1874.

Hon. A. J. SMITH,

Minister of Marine and Fisheries, &c., &c., &c., Ottawa.

SIR,—Having been instructed by your Department to visit River Ouelle for the purpose of ascertaining whether it could be adapted for the growth and production of salmon if re-stocked either by the natural or artificial methods of propagation, and having

inspected the river I beg to report as follows:-

River Ouelle empties into the St. Lawrence on the south shore, about ninety miles below Quebec. Upon my arrival at the station of the Grand Trunk Railway, I proceeded to the village which bears the same name, situate about four miles northward from the station, just where the river enters the St. Lawrence. Following the river upwards from its confluence with the St. Lawrence, I made a close personal inspection of it for several miles in order that I might form a correct judgment of its nature and particulars. For some twelve or fourteen miles the river is extremely crooked, and flows in the most winding and circuitous manner through a very rich and fertile tract of land; for nearly the whole of this distance the banks of the Ouelle are low and flat, extending on either side of the river a considerable distance. The land is cultivated by an industrious class of people, wholly of French origin. The crops consisted of hay, cereals and roots of various kinds, all of which had the appearance of yielding a very abundant harvest.

The tidal waters of the St. Lawrence flow up the Ouelle about four miles, but beyond this point and following the stream upwards some eight or ten miles, unless quieted by mill-dams stopping back the water, the river is rapid in its current, and for the most part runs over a gravelly and stony bed. Within the above distance there are a couple of grist mills, a carding mill and several saw mills, all driven by water-power from the river. The flouring mills are the first met with; about ten or twelve miles up river, above them are the saw mills, the largest and most important one being that of the Messrs King, who are the principal manufacturers of sawed lumber on the river. Beyond these saw mills I was informed that no other artificial impediments, existed upon the river by which salmon or other fish were prevented from passing upwards into the interior of the country.

From information which I obtained from the most intelligent and reliable sources in the neighborhood, I learned that in former years salmon frequented the Ouelle River in large numbers, migrating up a long distance into the interior of the country, but of late the river had become quite depleted of fish, salmon being only known there as a thing of the past. The cause of the extermination of this former valuable product of the river I also found had been brought about in like manner as has been found to be the case in other parts of the country, by the erection of impassible barriers across the river, such as mill-dams, thereby preventing the salmon from reaching their spawning grounds, and by netting, spearing, and otherwise killing them in a barbarous manner during their breeding or spawning seasons. The two principal difficulties existing at present for the re-production of salmon in the Ouelle, are the mill-dam at the Messrs. King's mill, and the immense quantities of sawdust and mill rubbish constantly thrown into the stream. The first forms an impassible barrier for the ascent of fish beyond that point, and the second wholly forbids the possibility of salmon entering the river for spawning purposes. The noxious gases, and other deleterious substances created by the great

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deposits of sawdust and mill rubbish in the bed of the stream so foul the water as to prevent the salmonoids or higher orders of fish from frequenting it. Should it therefore be considered expedient to again stock that river with salmon or other valuable fish, it will be imperatively necessary that the Fishery Laws in relation to close seasons should be closely observed, a free passage given for fish to ascend the stream, and that sawdust and other deleterious substances should not be allowed to pass into or be drifted or thrown into it.

From the personal inspection which I have made, and from the information which I have obtained from various sources, I am of opinion that by the application of the artificial method of propagating fish upon the Ouelle River, salmon could in a few years be re-produced there to such an extent as to give increased supplies of food and greater commercial benefits to the inhabitants of that section of the country.

Respectfully submitted,

Samuel Wilmot, Fishery Officer.